

Item No	Description	Quantity	Amount	
	<p><b><u>SECTION NO. 1</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES</u></b></p> <p>The JBCC Series 2000 Principal Building Agreement (March 2005 edition) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The JBCC Series 2000 Preliminaries (May 2005 edition) prepared by the Joint Building Contracts Committee for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities</p> <p>Contractors are referred to the above mentioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p> <p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>The Model Preambles for Trades (2008 Edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p>Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles</p>			
	<p><b>Carried to Collection</b></p>	R		
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>			

Item No	Description	Quantity	Amount
	<p><b><u>PRICING OF PRELIMINARIES</u></b></p> <p>Pricing of Preliminaries:</p> <p>Should the contractor select Option A in terms of clause 10.3 for the purpose of adjustment of these preliminaries, the amount entered in the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)</p> <p><b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b></p> <p><b><u>Definitions:</u></b></p>		
1	Clause 1.0 - Definitions and interpretation	Item	
	<p><b><u>Objective and preparation:</u></b></p>		
2	Clause 2.0 - Offer, acceptance and performance	Item	
3	Clause 3.0 - Documents	Item	
4	Clause 4.0 - Design responsibility	Item	
5	Clause 5.0 - Employer's agents	Item	
6	Clause 6.0 - Site representative	Item	
7	Clause 7.0 - Compliance with regulations	Item	
8	Clause 8.0 - Works risk	Item	
9	Clause 9.0 - Indemnities	Item	
10	Clause 10.0 - Works insurances	Item	
11	Clause 11.0 - Liability insurances	Item	
12	Clause 12.0 - Effecting insurances	Item	
13	Clause 13.0 - No clause	Item	
14	Clause 14.0 - Security	Item	
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Item No	Description	Quantity	Amount	
	<b><u>Execution:</u></b>			
15	Clause 15.0 - Preparation for and execution of the works	Item		
16	Clause 16.0 - Access to the works	Item		
17	Clause 17.0 - Contract instructions	Item		
18	Clause 18.0 - Setting out of the works			
	The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments	Item		
19	Clause 19.0 - Assignment	Item		
20	Clause 20.0 - Nominated subcontractors	Item		
21	Clause 21.0 - Selected subcontractors	Item		
22	Clause 22.0 - Employer's direct contractors	Item		
23	Clause 23.0 - Contractor's domestic subcontractors	Item		
	<b><u>Completion:</u></b>			
24	Clause 24.0 - Practical completion	Item		
25	Clause 25.0 - Works completion	Item		
26	Clause 26.0 - Final completion	Item		
27	Clause 27.0 - Latent defects liability period	Item		
28	Clause 28.0 - Sectional completion	Item		
29	Clause 29.0 - Revision of the date for practical completion			
	The removal and replacement of materials and/or workmanship which do not conform to specification or drawings shall not constitute grounds for an extension of the construction period nor for an adjustment to the contract value (clause 29.3)	Item		
30	Clause 30.0 - Penalty for noncompletion			
	<b>Carried to Collection</b>	R		
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Item No	Description	Quantity	Amount
	Construction period for Phase 1 to be 10 months and delay penalties of R 5000.00 per calendar day. Phase 1 as per decanting plan Drawing No 003 rev C date 19 11 2020		
	Construction period for Phase 2 to be 10 months and delay penalties of R 5000.00 per calendar day. Phase 2 as per decanting plan Drawing No 003 rev C date 19 11 2020	Item	
	<b>Payment:</b>		
31	Clause 31.0 - Interim payment to the contractor Materials and goods stored off site shall not be included in the amount authorised for payment	Item	
32	Clause 32.0 - Adjustment to the contract value		
	Clause 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence: "due to no fault of the contractor"		
	All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor.		
	Where prices are submitted by the contractor or nominated/selected subcontractors 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.	Item	
33	Clause 33.0 - Recovery of expense and loss	Item	
34	Clause 34.0 - Final account and final payment	Item	
35	Clause 35.0 - Payment to other parties	Item	
	<b>Cancellation:</b>		
36	Clause 36.0 - Cancellation by employer - contractor's default	Item	
37	Clause 37.0 - Cancellation by employer - loss and damage	Item	
38	Clause 38.0 - Cancellation by contractor - employer's default	Item	
39	Clause 39.0 - Cancellation - cessation of the works	Item	
	<b>Carried to Collection</b>	R	
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Item No	Description	Quantity	Amount
	<b><u>Dispute:</u></b>		
40	Clause 40.0 - Dispute settlement	Item	
	<b><u>Substitute provisions:</u></b>		
41	Clause 41.0 - State clauses	Item	
	<b><u>Contract variables:</u></b>		
42	Clause 42.0 - Pre-tender information Tenderers are referred to the document C1.2 Contract Data for variables pertaining to this contract	Item	
43	Clause 42.0 - Post-tender information The required post-tender information shall be inserted in the agreement after consultation with the contractor	Item	
	<b><u>SECTION B - PRELIMINARIES</u></b>		
	<b><u>Definitions and interpretation:</u></b>		
44	Clause 1.0 - Definitions and interpretation	Item	
	<b><u>Documents:</u></b>		
45	Clause 2.1 - Checking of documents	Item	
46	Clause 2.2 - Provisional bills of quantities	Item	
47	Clause 2.3 - Availability of construction documentation	Item	
48	Clause 2.4 - Interests of agents	Item	
49	Clause 2.5 - Priced documents	Item	
50	Clause 2.6 - Tender submission  Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance (C1.1)"	Item	
	<b><u>The site:</u></b>		
51	Clause 3.1 - Defined works area		
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Item No	Description	Quantity	Amount	
	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	Item		
52	Clause 3.2 - Geotechnical investigation			
	A copy of the geotechnical investigation report is annexed to these bills of quantities	Item		
53	Clause 3.3 - Inspection of the site			
	Tenderers shall complete the Site Inspection Certificate included in the tender documents and return the same with the tender submission	Item		
54	Clause 3.4 - Existing premises occupied	Item		
55	Clause 3.5 - Previous work - dimensional accuracy	Item		
56	Clause 3.6 - Previous work - defects	Item		
57	Clause 3.7 - Services - known	Item		
58	Clause 3.8 - Services - unknown	Item		
59	Clause 3.9 - Protection of trees	Item		
60	Clause 3.10 - Articles of value	Item		
61	Clause 3.11 - Inspection of adjoining properties	Item		
	<b><u>Management of contract:</u></b>			
62	Clause 4.1 - Management of the works	Item		
63	Clause 4.2 - Programme for the works	Item		
64	Clause 4.3 - Progress meetings	Item		
65	Clause 4.4 - Technical meetings	Item		
66	Clause 4.5 - Labour and plant records	Item		
	<b><u>Samples, shop drawings and manufacturer's instructions:</u></b>			
67	Clause 5.1 - Samples of materials	Item		
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Item No	Description	Quantity	Amount	
	<b><u>Financial aspects:</u></b>			
86	Clause 10.1 - Statutory taxes, duties and levies  Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)	Item		
87	Clause 10.2 - Payment of preliminaries	Item		
88	Clause 10.3 - Adjustment of preliminaries	Item		
89	Clause 10.4 - Payment certificate cash flow	Item		
	<b><u>General:</u></b>			
90	Clause 11.1 - Protection of the works	Item		
91	Clause 11.2 - Protection/isolation of existing/sectionally occupied works	Item		
92	Clause 11.3 - Security of the works	Item		
93	Clause 11.4 - Notice before covering work	Item		
94	Clause 11.5 - Disturbance	Item		
95	Clause 11.6 - Environmental disturbance	Item		
96	Clause 11.7 - Works cleaning and clearing	Item		
97	Clause 11.8 - Vermin	Item		
98	Clause 11.9 - Overhand work	Item		
99	Clause 11.10 - Instruction manuals and guarantees	Item		
100	Clause 11.11 - As built information	Item		
101	Clause 11.12 - Tenant installations	Item		
	<b><u>Schedule of variables:</u></b>			
102	12.1 - Pre-tender information			
	<b>Carried to Collection</b>	R		
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Item No	Description	Quantity	Amount
	Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that either specific requirements are not required or that the clause is not relevant to this specific contract	Item	
103	12.1.1 - Provisional bills of quantities [clause 2.2]  The quantities are provisional - YES	Item	
104	12.1.2 - Availability of construction documentation [clause 2.3]  Construction documentation is complete - YES	Item	
105	12.1.3 - Interests of agents [clause 2.4] - NONE	Item	
106	12.1.4 - Defined works area [clause 3.1] - YES  The work area will be pointed out by the principal agent to the contractor who will sign written acknowledgement therefore before commencing operations	Item	
107	12.1.5 - Geotechnical investigation [clause 3.2] - YES  A Geotechnical Investigation Report is included in this document	Item	
108	12.1.6 - Existing premises occupied [clause 3.4] - YES  The school will be in full operation during the work and disruption, dust and noise are to be kept to a minimum. Works areas to be clearly demarcated and fenced off	Item	
109	12.1.7 - Previous work - dimensional accuracy [clause 3.5]  The contractor shall, within reasonable period after taking possession of the site, but not exceeding ten (10) percent of the construction period or twenty (20) working days whichever is the lesser, check existing levels, lines, profiles and the like affecting the works and satisfy himself as to the dimensional accuracy of work previously executed. The contractor shall forthwith notify the principal agent and request a contract instruction regarding any dimensional inaccuracy found in work previously executed	Item	
110	12.1.8 - Previous work - defects [clause 3.6]  The contractor on becoming aware of a defect in work previously executed shall forthwith notify the principal agent requesting a contract instruction regarding such defect	Item	
	<b>Carried to Collection</b>	R	
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Item No	Description	Quantity	Amount
111	<p>12.1.9 - Services - known [clause 3.7]</p> <p>Existing services and points of connection are shown on the site plan or will be pointed out on the site by the principal agent</p>	Item	
112	<p>12.1.10 - Protection of trees [clause 3.9]</p> <p>Only those trees and shrubs indicated as such on the drawings shall be removed or cut back. The remainder of the trees and shrubs shall be left undamaged</p>	Item	
113	<p>12.1.11 - Inspection of adjoining properties [clause 3.11]</p> <p>The contractor shall make his own arrangements with the owners of adjoining properties in order to execute the works</p>	Item	
114	<p>12.1.12 - Enclosure of the works [clause 6.2]</p> <p>The contractor shall erect, maintain and remove on completion, hoardings with gantries, fans, 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</p>	Item	
115	<p>12.1.13 - Offices [clause 6.4.3]</p> <p>The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitable insulated and ventilated, provided with electric lighting, and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times</p>	Item	
116	<p>12.1.14 - Main noticeboard [clause 6.5]</p> <p>The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines deep blue. All wording shall be inscribed in deep blue painted Helvetica medium lettering. As alternative the notice board as approved by the professional bodies will be allowed. No sub-contractor's individual boards will be allowed on the site</p>	Item	
117	<p>12.1.15 - Subcontractors' noticeboard [clause 6.6]</p>		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>	R	

Item No	Description	Quantity	Amount
	A noticeboard is required - NO	Item	
118	12.1.16 - Water [clause 7.2]		
	Option A (by contractor) YES		
	Option B (by employer - free of charge) NO		
	Option C (by employer - metered) NO	Item	
119	12.1.17 - Electricity [clause 7.3]		
	Option A (by contractor) YES		
	Option B (by employer - free of charge) NO		
	Option C (by employer - metered) NO	Item	
120	12.1.18 - Telecommunications [clause 7.4]		
	Telephone YES		
	Facsimile NO		
	E-mail YES	Item	
121	12.1.19 - Ablution facilities [clause 7.5]		
	Option A (by contractor) YES		
	Option B (by employer - free of charge) NO	Item	
122	12.1.20 - Protection/isolation of existing/sectionally occupied works [clause 11.2]		
	The contractor shall provide all reasonable temporary measures to protect/isolate the existing and/or section of the occupied works and remove such measures on completion	Item	
123	12.1.21 - Special attendance [clause 9.2] - NO	Item	
124	12.1.22 - Protection of the works [clause 11.1] - YES	Item	
125	12.1.23 - Disturbance [clause 11.5]		
	<b>Carried to Collection</b>	R	
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Item No	Description	Quantity	Amount	
	<p>The contractor shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent</p> <p>The contractor shall execute the works with a minimum of disturbance to adjoining premises, any parts of the works already handed over and the occupants of those premises and/or parts</p>	Item		
126	12.1.24 - Environmental disturbance [clause 11.6] - NO	Item		
127	<p>12.2 - Post-tender information</p> <p>The required post-tender information shall be inserted in the preliminaries after consultation with the contractor</p>	Item		
	<p><b><u>SECTION C - SPECIFIC PRELIMINARIES</u></b></p> <p>Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item</p>			
128	<p><b><u>CONTRACT DRAWINGS</u></b></p> <p>The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed</p> <p>Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent</p>	Item		
129	<p><b><u>GENERAL PREAMBLES</u></b></p> <p>These tender documents "General Specification (PW 371-A) July 2013" and "Particular Specification (PW 371-B) July 2013" which are both obtainable on Public Works website alternatively a copy can be e-mailed on request from the Quantity Surveyor offices, and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used. No claim arising from brevity of description of items fully described in the said Preambles for Trades will be entertained</p>	Item		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>	R		

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130	<p><b><u>TRADE NAMES</u></b></p> <p>Wherever a trade name for any product has been described in the Priced Document, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders</p> <p>If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for</p>	Item	
131	<p><b><u>PROPRIETARY BRANDED PRODUCTS</u></b></p> <p>The contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instruction after consultation with the manufacturer's authorised representative</p>	Item	
132	<p><b><u>CONFIDENTIALITY</u></b></p> <p>The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works No information regarding this project shall be published or disclosed without the prior written consent of the employer</p>	Item	
133	<p><b><u>OVERTIME</u></b></p> <p>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 cost for such overtime are to be borne by the employer</p>	Item	
134	<p><b><u>AS BUILT DRAWINGS</u></b></p> <p>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</p>	Item	
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>	R	



Item No	Description	Quantity	Amount
140	<p><b><u>TESTING OF WINDOWS FOR WATERTIGHTNESS</u></b></p> <p>Each window shall be tested for watertightness with water sprayed on by means of a 20mm hosepipe using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure in the hosepipe shall be boosted by means of compressed air or other approved means</p>	Item	
141	<p><b><u>AUTHORISATION FOR THE TAKING OF PHOTOGRAPHS</u></b></p> <p>The contractor shall obtain prior authorisation from the employer for the making of any sketches or the taking of any photographs of any site, installation, building or civil works belonging to the employer and shall ensure that all personnel, subcontractors and other persons entering the site shall comply with this requirement as well.</p>	Item	
142	<p><b><u>HIV/AIDS AWARENESS</u></b></p> <p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under the two items below hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained</p> <p>The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (Section A)" or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p>	Item	
143	<p><b><u>AWARENESS CHAMPION</u></b></p> <p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p>	Item	
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>	R	

Item No	Description	Quantity	Amount
	<b><u>AWARENESS WORKSHOPS</u></b>		
144	Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification	Item	
	<b><u>POSTERS, BOOKLETS, VIDEOS, ETC.</u></b>		
145	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification	Item	
	<b><u>ACCESS TO CONDOMS</u></b>		
146	Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification	Item	
	<b><u>CO-OPERATION OF CONTRACTOR FOR COST MANAGEMENT</u></b>		
147	It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors	Item	
	<b><u>MONITORING</u></b>		
148	Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification	Item	
	<b><u>REPORTING BY CONTRACTOR</u></b>		
149	The contractor is required to complete the attached Contractor's Monthly Report which is to be submitted together with the contractors payment claim. Payment of the contractor is conditional on this information being accurate and timeously provided	Item	
	<b>Carried to Collection</b>	R	
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150	<p><b><u>PLANT RECORDS</u></b></p> <p>At the end of each month 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</p>	Item	
151	<p><b><u>LOCAL LABOUR</u></b></p> <p>Allow for monthly submission of proof of employment of local skilled and unskilled labour to the principal agent.</p> <p>It is a general requirement of this contract that persons normally resident in the locality of the works (local labour) be given preference for employment on the contract. Should adequate and appropriate labour not be available within the locality, other labour may be subject to satisfactory proof being provided that every reasonable endeavour has been made to employ local labour. The contractor shall identify the local community leaders with the purpose of negotiating with them regarding the utilisation of local labour in the construction process. The contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth. The contractor shall, in general, maximise the involvement of the local community.</p> <p>The principal agent shall be empowered to inspect the books and records of the contractor from time to time to ensure that the requirements are met. Should it become apparent that these conditions are not being complied with; the principal agent shall close down the works until the requirements are met. Any work stoppages so occasioned will be for the contractor's account.</p>	Item	
152	<p><b><u>LOCAL BUILDING MATERIALS</u></b></p> <p>Preference shall be given to the supply of materials produced or manufactured in the Eastern Cape Province provided that:</p> <p>a) Such materials comply in all respects with the specific requirements of PW371 specification</p> <p>b) The availability of such materials shall not adversely affect the desired progress of the specific works</p> <p>c) The use of such materials shall not constitute grounds for any claim for increased cost in respect thereof</p>	Item	
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>	R	

Item No	Description	Quantity	Amount
153	<p><b><u>DISPOSAL SITE-SOLID WASTE/ENVIRONMENTALLY SENSITIVE MATERIALS</u></b></p> <p>All disposal of solid waste shall be deposited at an approved disposal site to be located by the contractor. All handling of environmentally sensitive materials such as asbestos, etc., is to be carried out by a registered waste disposal specialist and all laws and bylaws are to be appropriate state body will be required and is to be to the principal agent's approval. Written confirmation of appropriate disposal is to be issued to the principal agent</p>	Item	
154	<p><b><u>WAIVER OF LIEN</u></b></p> <p>The tenderers are notified that he/she shall sign "Waiver of Lien" together with the JBCC Principal Building Agreement Edition 4.1 Code 2101 March 2005</p>	Item	
155	<p><b><u>OCCUPATIONAL HEALTH AND SAFETY ACT</u></b></p> <p>The contractor shall comply with all the requirements set out in the Health and Safety Specification for Construction Work as contained within these tender documents and the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).</p> <p>It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities.</p> <p>The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.</p> <p>In addition but not limited to the contractor shall:</p> <ul style="list-style-type: none"> <li>- Comply with the health and safety specification for the works</li> <li>- Prepare and agree with the health and safety consultant the health and safety plan for the works</li> </ul>	R	
<b>Carried to Collection</b>			
<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries</p>			





Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>ALTERATIONS AND DEMOLITIONS</u></b></p> <p><u>View site</u></p> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained Explosives</p> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored, transported over a distance of approximately 50km to store and handed over to the employer</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 2 ALTERATIONS &amp; DEMOLITIONS Bill No. 1 Alterations &amp; Demolitions</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and re-hanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)</p> <p><b><u>TEMPORARY BARRICADES, SCREENS, ETC</u></b></p> <p><b><u>Temporary barricades, screens, roofs, etc including removal</u></b></p> <p>1 Kwik Klik hoarding system or similar approved min 1.8m high, including all posts etc. to be utilised for the full period of the project including shade cloth</p> <p>2 Temporary 6m swing gate</p> <p><b><u>Decanting Area ( 12 months Temporary rental including transportation)</u></b></p> <p>3 Temporary facility for classes</p> <p>4 Temporary Admin facility</p>				
		m	430		
		No	1		
		No	16		
		No	1		
	<b>Carried to Collection</b>				R
	Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions				

Item No	Description	Unit	Quantity	Rate	Amount
5	Temporary Grade R classrooms (includes toilets)	No	2		
6	Temporary toilet facility for students and teachers	No	4		
	<b><u>REMOVAL OF EXISTING WORK</u></b>				
	<b><u>Demolish and/or removing complete structures</u></b>				
7	Demolish and remove existing store room complete	m2	12		
8	Removing existing mobile class to be set up elsewhere for reuse if possible	No	4		
9	Demolish existing court area complete including removal of rubbles and scarifying earth and making good	m2	583		
	<b><u>Breaking up and removing reinforced concrete, including cutting off and removing reinforcement</u></b>				
10	150mm Thick surface beds	m2	112		
	<b><u>Breaking down and removing brickwork etc</u></b>				
11	Half brick walls	m2	76		
12	One brick walls	m2	9		
13	Existing Bris-soliel and making good	m2	10		
	<b><u>Existing plastered walls</u></b>				
14	Plasterwork to be chipped off in full sections where necessary and replastered smooth to match existing finish (paintwork measured elsewhere)	m2	450		
	<b><u>Taking out and removing doors, windows, etc, including thresholds, sills, etc (building up openings and making good finishes elsewhere)</u></b>				
15	Timber single door and frame not exceeding 2,5m <sup>2</sup>	No	4		
16	Window not exceeding 2,5m <sup>2</sup>	No	10		
	<b>Carried to Collection</b>				R
	Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Hacking up/off and removing floor coverings including removing mortar bed or adhesive from concrete or brickwork if applicable and preparing surfaces, including levelling, for new screed finish</u></b>				
17	Removal of Floor finishes + new screed	m2	1 567		
18	Repair concrete floor cracks as per engineers specs	m	250		
	<b><u>Taking out and remove existing ceiling, insulation etc. complete including carting away</u></b>				
19	Removal of ceilings and insulation cornices etc.	m2	1 567		
	<b><u>Hacking up/off and removing tiles from any wall and floors and including preparing surfaces for new screed, plaster, tile finishes, etc</u></b>				
20	Removing tiles from existing walls	m2	184		
21	Removing tiles from existing floors	m2	88		
	<b><u>Remove new fascia boards</u></b>				
22	Stripping existing fascia boards that are deteriorated where necessary	m	550		
	<b><u>Taking out/off and removing sundry item from all walls, leaving existing walls clear of any objects, fixtures, joinery, fittings etc. including carting away measured in number of building</u></b>				
23	Stripping of all wall fixtures and fittings	No	10		
	<b><u>Taking out and removing sanitary fittings, tanks, geysers, etc, including disconnecting from pipes, traps, etc and making good floor and wall finishes, tiling and paintwork elsewhere</u></b>				
24	Removal of all fittings including pipework as required	No	44		
	<b><u>Removing ironmongery</u></b>				
25	Removal of all existing ironmongery to be replaced with new full sets (measured elsewhere)	No	122		
	<b>Carried to Collection</b>				
	Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>CUTTING THROUGH FLOORS AND CEILINGS</u></b>				
	<b><u>Cutting through:</u></b>				
26	150mm Thick unreinforced concrete surface bed for 700mm wide concrete wall footings and making good concrete on both sides of new 230 brick walls (making good floor finishes elsewhere)	m	108		
	<b><u>BUILDING UP OPENINGS</u></b>				
	<b><u>Brickwork in NFP bricks in class II mortar in building up openings</u></b>				
27	Half brick walls	m2	12		
28	One brick walls	m2	23		
	<b><u>Face bricks pointed with flush recessed horizontal and vertical joints to match existing</u></b>				
29	Extra over brickwork for face brickwork in patches	m2	23		
30	Cutting toothing's and bonding new face brickwork to existing	m	20		
	<b><u>Sundries</u></b>				
31	Cutting toothing's and bonding new brickwork to existing	m2	34		
	<b><u>Sundry Allowances</u></b>				
32	Allowance for timber doors to match existing due to existing door conditions, complete including ironmongery fixing etc.	No	12		
33	Allowance for replacing trusses, connection plates etc. complete due to existing conditions, measure on plan	m2	160		
34	Allowance for replacing glazing where glazing has been damaged due to construction process	m2	75		
	<b>Carried to Collection</b>				
	Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>CLEANING AND PREPARING SURFACES</u></b>				
	<b><u>Walls</u></b>				
35	Cleaning existing facebrick walls including scrubbing down ,cleaning and removing efflorescent	m2	2 058		
	<b><u>Roller Course lintel</u></b>				
36	Cleaning existing facebrick walls including scrubbing down ,cleaning and removing efflorescent	m	404		
	<b><u>Window cill</u></b>				
37	Cleaning existing facebrick cills, surfaces to be brushed down, clean & free of blemishes, one coat plaster primer &one coat primer and two coats superior quality acrylic emulsion paint or similar approved	m	404		
	<b><u>Door + Window frames</u></b>				
38	Surfaces to be brushed down, clean & free of blemishes, one coat primer & two coats superior quality universal enamel paint or similar approved	No	186		
	<b><u>Existing timber trusses</u></b>				
39	Sand down existing timber trusses (measured on plan)	m2	980		
40	Existing timber skirting to be removed, sanded down with abrasive paper leaving surface clean, dry and dust free. ready for painting	m	647		
	<b><u>Existing plastered walls</u></b>				
41	Where required (more than general painting prep work) surfaces to be brushed down, clean and free from blemishes	m2	2 057		
	<b>Carried to Collection</b>				R
	Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions				

Section No. 2 Bill No. 1 Alterations & Demolitions <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		Page No 21		Amount
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		23		-----
		24		-----
		25		-----
		26		-----
Section No. 2 ALTERATIONS & DEMOLITIONS Bill No. 1 Alterations & Demolitions			R	

Carried to Final Summary

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p>Decorative thermosetting plastic laminate covering</p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 1 Carpentry and Joinery</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
1	18mm x 100mm High skirtings	m	448		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
2	250 x 20mm Fascias	m	54		
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>White boards</u></b>				
3	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, full size magnetic porcelain with anodized trim and including tray and tackable map rail, fixed to plastered walls	No	20		
	<b>Carried to Collection</b>				R
	Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 1 Carpentry and Joinery				

Section No. 3  Bill No. 1  Carpentry and Joinery  <b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		28		-----	
		29		-----	
Carried Forward to Summary of Section No. 3  Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 1 Carpentry and Joinery				R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 3</u></b>  <b><u>BILL NO. 2</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p>	m2	780		
	<b>Carried to Collection</b>			R	
	<p>Section No. 3  EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4  Bill No. 2  Ceilings, Partitions and Access Flooring</p>				

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine branderling at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber branderling shall be suitably fixed to the tie beam/joist.</u></p> <p>External nailed-up ceiling</p> <p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p>	m2	46		
3	Cornice	m	448		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 2 Ceilings, Partitions and Access Flooring</p>			R	

Section No. 3  Bill No. 2  Ceilings, Partitions and Access Flooring  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		Page No 31		Amount
		32		-----
				-----
<p align="right"><b>Carried Forward to Summary of Section No. 3</b></p>			R	
Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 2 Ceilings, Partitions and Access Flooring				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 3</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>1 On new screeded floors</p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>2 100mm High skirting</p>	m2	780		
	<p align="right"><b>Carried Forward to Summary of Section No. 3</b></p>			R	
	<p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 3 Floor Coverings, Wall Linings, etc.</p>				

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p>Stainless Steel floor mounted door stop, size 24 x 45mm - 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.</p>	No	20		
	<p align="right"><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 4 Ironmongery</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 3</u></b> <b><u>BILL NO. 5</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 5 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
1	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><u>Colour</u></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of 2.5kg pigment per pocket of cement, of uniform appearance and consistent colour throughout</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds on concrete</u></b></p> <p>30mm Thick self levelling screed on floors and landings</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 5 Plastering</p>	m2	780		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p> <p>On walls</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3                      EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4                      Bill No. 5                      Plastering</p>	m2	1 267		
					R

Section No. 3				
Bill No. 5				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		36		
		37		
		38		
<b>Carried Forward to Summary of Section No. 3</b>				
Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 5 Plastering			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m<sup>2</sup> All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	180		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4 Bill No. 6 Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 3</u></b>  <b><u>BILL NO. 7</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><b><u>Previously painted plastered surfaces</u></b></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><b><u>Previously painted metal surfaces</u></b></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><b><u>Previously painted wood surfaces</u></b></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 3  EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4  Bill No. 7  Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	1 267		
2	On external walls	m2	2		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
3	On ceilings	m2	780		
4	On cornice not exceeding 300mm girth	m	448		
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
5	On external ceilings	m2	46		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On door frames	m2	2		
7	On window frames	m2	30		
	<b><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
8	On door frames	m2	5		
	<b>Carried to Collection</b>				R
	Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 7 Paintwork				

Item No	Description	Unit	Quantity	Rate	Amount
9	On doors  <u>Finished with grey zinc Chromate rust resistant primer</u>	m2	2		
10	On door frames	m2	2		
11	On doors  <b><u>ON WOOD</u></b>  <b><u>Bergermaster Contractors Gloss Enamel (colour to be selected) to new interior wood. One coat Primer for Wood, one coat Trade Universal Undercoat and two coats Contractors Gloss Enamel</u></b>	m2	2		
12	On doors	m2	30		
	<b>Carried to Collection</b>				R
	Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 7 Paintwork				

Section No. 3				
Bill No. 7				
Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		41		
		42		
		43		
<b>Carried Forward to Summary of Section No. 3</b>				
Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 Bill No. 7 Paintwork			R	

Bill No	Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4 <b>SECTION SUMMARY - EXISTING CLASSROOMS BLOCK 1, 2, 3 &amp; 4</b>	Page No		Amount
1	Carpentry and Joinery	30		
2	Ceilings, Partitions and Access Flooring	33		
3	Floor Coverings, Wall Linings, etc.	34		
4	Ironmongery	35		
5	Plastering	39		
6	Glazing	40		
7	Paintwork	44		
	<b>Carried to Final Summary</b>		R	
	Section No. 3 EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4			

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p>The following are typical examples of descriptions of "nature of ground" Nature of ground</p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><b><u>Carting away of excavated material</u></b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4 EXISTING LIBRARY Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><b><u>Testing</u></b></p> <p>Prices for filling are to include for all necessary density and other tests SITE CLEARANCE</p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
		m2	40		
		m3	8		
		m3	1		
		m3	1		
		m3	7		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	38		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	From prescribed stock piles to trenches and holes	m3	1		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Ashtho Density</u></b>				
9	Under surface beds in 150mm layer	m3	6		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				
	Section No. 4 EXISTING LIBRARY Bill No. 1 Earthworks (Provisional)			R	

Section No. 4				
Bill No. 1				
Earthworks (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		46		
		47		
		48		
<b>Carried Forward to Summary of Section No. 4</b>				
Section No. 4 EXISTING LIBRARY Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>				
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	1		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Bases	m3	1		
3	Strip footings	m3	2		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
4	Surface beds on waterproofing (including thickenings)	m3	4		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>TEST CUBES</u></b>				
5	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
6	Surface beds, slabs, etc to falls	m2	38		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
7	Surface beds, slabs, etc to falls and currents	m2	20		
	<b><u>20 MPa non-shrink grout</u></b>				
8	Bedding approximately 100mm thick under 50 x 50mm base plate	No	10		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	27		
	<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
10	Not exceeding 300mm high to edges of surface beds	m	24		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
11	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	25		
12	3 x 40mm Saw-cut joints in top of concrete	m	10		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 2 Concrete Formwork & Reinforcement				



Section No. 4				
Bill No. 2				
Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		50		
		51		
		52		
		53		
<b>Carried Forward to Summary of Section No. 4</b>				
Section No. 4				
EXISTING LIBRARY				
Bill No. 2				
Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4 EXISTING LIBRARY Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	14		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	56		
3	Half brick walls in beamfilling	m2	10		
4	One brick walls	m2	5		
	<p><b><u>Steel bar reinforcement</u></b></p>				
5	8mm Diameter mild steel bars built in horizontally	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>				
6	75 x 110mm Lintels in lengths not exceeding 3m	m	10		
7	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
8	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m	m	10		
	<b><u>Turning pieces to lintels etc</u></b>				
9	220mm Wide turning pieces	m	6		
	<b><u>Air bricks etc</u></b>				
10	229 x 152mm Terracotta vermin proof air brick	No	4		
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
11	220mm Copings on top of one brick walls	m	40		
12	Face Brick lintels over windows and doors	m	5		
	<b><u>WINDOW SILLS</u></b>				
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
13	110mm Facebrick window sills flat and slightly projecting	m	5		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 3 Masonry				

Section No. 4				
Bill No. 3				
Masonry				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		55		
		56		
		57		
<b>Carried Forward to Summary of Section No. 4</b>				
Section No. 4 EXISTING LIBRARY Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 4 EXISTING LIBRARY Bill No. 4 Carpentry and Joinery</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
1	18mm x 100mm High skirtings	m	42		
	<b><u>CUPBOARDS AND COUNTER TOP JOINERY TO KITCHENS, BEDROOMS, TOPS ETC</u></b>				
	<b><u>Cupboards and shelving etc.</u></b>				
2	Reception desk as per architects specifications	No	1		
3	Storeroom shelving as per architect details	No	1		
4	Work room shelving as per architect specifications	No	1		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
5	250 x 20mm Fascias	m2	20		
	<b><u>JOINERY SUNDRIES</u></b>				
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>White boards</u></b>				
6	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, full size magnetic porcelain with anodized trim and including tray and tackable map rail, fixed to plastered walls	No	1		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 4 Carpentry and Joinery				

Section No. 4				
Bill No. 4				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		59		
		60		
<b>Carried Forward to Summary of Section No. 4</b>				
Section No. 4				
EXISTING LIBRARY				
Bill No. 4				
Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 4</u></b>  <b><u>BILL NO. 5</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p>	m2	121		
	<b>Carried to Collection</b>			R	
	<p>Section No. 4  EXISTING LIBRARY  Bill No. 5  Ceilings, Partitions and Access Flooring</p>				

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p> <p>Cornice</p> <p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine branderling at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber branderling shall be suitably fixed to the tie beam/joist.</u></p>	m	71		
3	External nailed-up ceiling	m2	11		
<b>Carried to Collection</b>					R
<p>Section No. 4  EXISTING LIBRARY  Bill No. 5  Ceilings, Partitions and Access Flooring</p>					

Section No. 4					
Bill No. 5					
Ceilings, Partitions and Access Flooring					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		62			
		63			
<b>Carried Forward to Summary of Section No. 4</b>				R	
Section No. 4					
EXISTING LIBRARY					
Bill No. 5					
Ceilings, Partitions and Access Flooring					

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>On new screeded floors</p>	m2	96		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 4</b></p> <p>Section No. 4 EXISTING LIBRARY Bill No. 6 Floor Coverings, Wall Linings, etc.</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 7</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p>				
1	2 x Stainless Steel floor mounted door stop, size 24 x 45mm - 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
2	Stainless Steel floor mounted door stop- 4 lever lockset with Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	2		
	<b>Carried Forward to Summary of Section No. 4</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 7 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 4 EXISTING LIBRARY Bill No. 8 Metalwork</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>3 A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process</p> <p>4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked</p> <p>5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><b><u>DOORS, WINDOWS, CURTAIN WALLING, SHOPFRONTS, ETC</u></b></p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p>				
1	Frame for 1568 x 2032mm double door	No	1		
	<p><b><u>1,2mm Double rebated frames suitable for half brick walls WITH 1 PAIR OF HINGES</u></b></p>				
2	Frame for 813 x 2032mm single door	No	2		
	<p><b><u>Record room/strongroom doors etc suitable for 230mm walls fixed to brickwork or concrete</u></b></p>				
3	Chubb or similar approved, SANS 949:2005 approved left hand opening category 2 heavy duty strong room door and frame constructed of 20mm steel plate. All to fit wall opening of 1930 x 850mm wide. Mass 450kg. Fitted with one-way moving bolt work with 3 x 250mm round bolts with rebate on hinged side with 2 x 7-lever keylocks, 1 x combination lock, inner release mechanism and floor mounted door stop,	No	1		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 8 Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>GALVANISED PRESSED STEEL WINDOW FRAMES</u></b></p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p> <p>Top hung standard steel window, finished in Grey oxide primer (Code: 4-BH), size 889mm x 427mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant</p>	No	2		
<b>Carried to Collection</b>					R
Section No. 4 EXISTING LIBRARY Bill No. 8 Metalwork					

Section No. 4					
Bill No. 8					
Metalwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		67			
		68		-----	
		69		-----	
				-----	
<b>Carried Forward to Summary of Section No. 4</b>				R	
Section No. 4 EXISTING LIBRARY Bill No. 8 Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b> <b><u>BILL NO. 9</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4 EXISTING LIBRARY Bill No. 9 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
1	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><u>Colour</u></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of 2.5kg pigment per pocket of cement, of uniform appearance and consistent colour throughout</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds on concrete</u></b></p> <p>30mm Thick self levelling screed on floors and landings</p>	m2	96		
<b>Carried to Collection</b>					R
<p>Section No. 4 EXISTING LIBRARY Bill No. 9 Plastering</p>					

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Prepare substrate by abrasive blasting or grinding, leaving surface clean, sound, laitance and dust free with a maximum moisture content of 4%. Prime surface with one coat Solvent Based Epoxy Sealer &amp; Penetrating Coat. Apply two coats Beige Ivory 304 (4:1 mixing ratio) epoxy floor with a minimum dry film thickness of 45 microns. Applied in accordance with approved specifications by approved applicators.</u></p> <p>On floors and landings</p> <p><b><u>INTERNAL PLASTER</u></b></p> <p><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></p>	m2	26		
3	On walls	m2	145		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4 EXISTING LIBRARY Bill No. 9 Plastering</p>			R	

Section No. 4					
Bill No. 9					
Plastering					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		71			
		72			
		73			
<b>Carried Forward to Summary of Section No. 4</b>				R	
Section No. 4 EXISTING LIBRARY Bill No. 9 Plastering					

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m2 All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	15		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 4</b></p> <p>Section No. 4                      EXISTING LIBRARY                      Bill No. 10                      Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b>  <b><u>BILL NO. 11</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p><b><u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u></b></p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4  EXISTING LIBRARY  Bill No. 11  Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	145		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	121		
3	On cornice not exceeding 300mm girth	m	71		
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On external ceilings	m2	11		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
5	On door frames	m2	1		
6	On window frames	m2	1		
	<b><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
7	On door frames	m2	1		
	<b>Carried to Collection</b>				R
	Section No. 4 EXISTING LIBRARY Bill No. 11 Paintwork				

Item No	Description	Unit	Quantity	Rate	Amount
8	<p><b><u>ON WOOD</u></b></p> <p><b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b></p> <p>On doors</p>	m2	21		
<b>Carried to Collection</b>					R
Section No. 4 EXISTING LIBRARY Bill No. 11 Paintwork					

Section No. 4				
Bill No. 11				
Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		76		
		77		
		78		
<b>Carried Forward to Summary of Section No. 4</b>				
Section No. 4 EXISTING LIBRARY Bill No. 11 Paintwork				

Bill No	Section No. 4 EXISTING LIBRARY <b><u>SECTION SUMMARY - EXISTING LIBRARY</u></b>	Page No	Amount
1	Earthworks (Provisional)	49	
2	Concrete Formwork & Reinforcement	54	
3	Masonry	58	
4	Carpentry and Joinery	61	
5	Ceilings, Partitions and Access Flooring	64	
6	Floor Coverings, Wall Linings, etc.	65	
7	Ironmongery	66	
8	Metalwork	70	
9	Plastering	74	
10	Glazing	75	
11	Paintwork	79	
	<b>Carried to Final Summary</b>		R
	Section No. 4 EXISTING LIBRARY		

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Trusses are at maximum 750mm centres</u></b></p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 5  EXISTING MULTI PURPOSE CLASSROOMS  Bill No. 1  Carpentry and Joinery</p>			R	



Section No. 5				
Bill No. 1				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		81		
		82		
<b>Carried Forward to Summary of Section No. 5</b>				
Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 1 Carpentry and Joinery			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b> <b><u>BILL NO. 2</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>SUSPENDED CEILINGS</u></b></p> <p><b><u>600 x 600 compound ceiling with aluminium Ts</u></b></p> <p>1 Ceilings suspended not exceeding 1m below roof trusses</p> <p><b><u>Cornice, perimeter trims, etc to ceiling</u></b></p> <p><b><u>Gypsum cornice, 75 x 75mm high</u></b></p> <p>2 Cornice</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 5</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 2 Ceilings, Partitions and Access Flooring</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 3</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>On new screeded floors</p>	m2	105		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 5</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 3 Floor Coverings, Wall Linings, etc.</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p>Stainless Steel floor mounted door stop, size 24 x 45mm - 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.</p>	No	2		
	<p align="right"><b>Carried Forward to Summary of Section No. 5</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 4 Ironmongery</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b>  <b><u>BILL NO. 5</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 5  EXISTING MULTI PURPOSE CLASSROOMS  Bill No. 5  Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	105		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	206		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 5 Plastering</p>			R	

Section No. 5				
Bill No. 5				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		87		
		88		
<b>Carried Forward to Summary of Section No. 5</b>				
Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 5 Plastering			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m2 All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	16		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 5</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 6 Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 7 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PREPARATORY WORK TO EXISTING WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	206		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	105		
3	On cornice not exceeding 300mm girth	m	58		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
4	On door frames	m2	3		
5	On window frames	m2	15		
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On doors	m2	10		
7	Timber trusses (measure on plan)	m2	104		
	<b><u>Painted with Carbolineum paint</u></b>				
8	On exposed trusses	m2	12		
	<b>Carried to Collection</b>				R
	Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 7 Paintwork				

Section No. 5				
Bill No. 7				
Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		91		
		92		
<b>Carried Forward to Summary of Section No. 5</b>				
Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS Bill No. 7 Paintwork			R	

	Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS			
<b>Bill No</b>	<b><u>SECTION SUMMARY - EXISTING MULTI PURPOSE CLASSROOMS</u></b>	<b>Page No</b>		<b>Amount</b>
1	Carpentry and Joinery	83		
2	Ceilings, Partitions and Access Flooring	84		
3	Floor Coverings, Wall Linings, etc.	85		
4	Ironmongery	86		
5	Plastering	89		
6	Glazing	90		
7	Paintwork	93		
	<b>Carried to Final Summary</b>		R	
	Section No. 5 EXISTING MULTI PURPOSE CLASSROOMS			

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (Provisional)</u></b></p> <p>The following are typical examples of descriptions of "nature of ground" Nature of ground</p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 1 Earthworks (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	38		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	From prescribed stock piles to trenches and holes	m3	1		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
9	Under surface beds in 150mm layer	m3	6		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 1 Earthworks (Provisional)			R	

Section No. 6					
Bill No. 1					
Earthworks (Provisional)					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		95			
		96		-----	
		97		-----	
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<b>Carried Forward to Summary of Section No. 6</b>				R	
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 1 Earthworks (Provisional)					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	1		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Bases	m3	1		
3	Strip footings	m3	2		
	<p><b><u>25MPa/19mm concrete</u></b></p> <p><b><u>Additional concrete for raised floor section - cast on existing floor</u></b></p>				
4	Bases	m3	2		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>				
	<b><u>25MPa/19mm concrete</u></b>				
5	Surface beds on waterproofing (including thickenings)	m3	4		
	<b><u>TEST CUBES</u></b>				
6	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
7	Surface beds, slabs, etc to falls	m2	38		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
8	Surface beds, slabs, etc to falls and currents	m2	20		
	<b><u>20 MPa non-shrink grout</u></b>				
9	Bedding approximately 100mm thick under 50 x 50mm base plate	No	5		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	27		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
11	Not exceeding 300mm high to edges of surface beds	m	24		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
12	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	10		
13	3 x 40mm Saw-cut joints in top of concrete	m	10		
	<b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b>				
14	Surface beds not exceeding 300mmm thick as per engineers details	m	10		
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>				
15	Y10mm Diameter bars	t	1.00		
16	Y8mm Diameter bars	t	1.00		
	<b><u>Fabric reinforcement</u></b>				
17	Type 193 fabric reinforcement in concrete surface beds etc	m2	38		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 2 Concrete Formwork & Reinforcement				

Section No. 6					
Bill No. 2					
Concrete Formwork & Reinforcement					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		99			
		100			
		101			
		102			
<b>Carried Forward to Summary of Section No. 6</b>					
Section No. 6					
REFURB SCIENCE AND MULTIMEDIA CENTRE					
Bill No. 2					
Concrete Formwork & Reinforcement					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	12		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	39		
	<p><b><u>Steel bar reinforcement</u></b></p>				
3	8mm Diameter mild steel bars built in horizontally	t	1.00		
	<p><b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b></p>				
4	75 x 110mm Lintels in lengths not exceeding 3m	m	10		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
5	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
6	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m	m	10		
	<b><u>Turning pieces to lintels etc</u></b>				
7	220mm Wide turning pieces	m	6		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
8	220mm Copings on top of one brick walls	m	6		
9	Facebrick lintel	m	6		
	<b><u>WINDOW SILLS</u></b>				
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
10	110mm Facebrick window sills flat and slightly projecting	m	6		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 3 Masonry				

Section No. 6					
Bill No. 3					
Masonry					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		104			
		105			
		106			
<b>Carried Forward to Summary of Section No. 6</b>				R	
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 3 Masonry					

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<b><u>Waterproofing</u></b>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	9		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	42		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	78		
	<b>Carried Forward to Summary of Section No. 6</b>				
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC.</u></b>				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	42		
2	Side cladding	m2	42		
3	Gable end side cladding n.e 250mm	m2	42		
4	Ridge or Valley flashing	m	28		
5	Ridge Closer	m	28		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
6	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	105		
	<b>Carried Forward to Summary of Section No. 6</b>				
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 5 Roof Coverings, Claddings, etc.				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p><b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</u></b></p> <p><b><u>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</u></b></p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 6 Carpentry and Joinery</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 12.2 x 35.1m overall on plan x 1.893m high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	15		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	106		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	40		
5	250 x 20mm Barge boards	m	28		
6	250 x 20mm Fascias	m	28		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
	<b><u>DOORS ETC</u></b>				
7	813 x 2032 x 40mm Solid core flush masonite panel door	No	3		
	<b><u>WINDOWS</u></b>				
	<b><u>Standard hardboard</u></b>				
8	10mm Duct covers in 50mm widths, fixed at 100mm centres along edges with chromium plated dome headed screws in cup washers	m2	27		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>JOINERY SUNDRIES</u></b>				
	<b><u>Wrought Meranti or similar approved</u></b>				
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>Wrought Meranti or similar</u></b>				
9	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	2		
	<b><u>White boards</u></b>				
10	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, fixed to plastered walls	No	1		
	<b><u>Fire extinguisher boards</u></b>				
11	20mm Backboards for 4,5kg fire extinguishers plugged to wall	No	2		
	<b><u>CUPBOARDS AND COUNTER TOP JOINERY TO KITCHENS, BEDROOMS, TOPS ETC</u></b>				
	<b><u>Cupboards and shelving etc.</u></b> <b><u>Refer to Sediko - Sheet - DBSA-JBT-S1-ARCH-DWG114 Science &amp; Media-Plans &amp; Sections</u></b>				
12	Fixed Cupboard to architects spec	No	1		
	<b><u>Counter Tops</u></b> <b><u>Refer to Sediko - Sheet - DBSA-JBT-S1-ARCH-DWG114 Science &amp; Media-Plans &amp; Sections</u></b>				
13	Solid wrapped melamine worktop counter fixed to wall to wall on both side with brackets or similar including holes in Length in two parts of 9meters	No	1		
14	Counter top as per design detail 600mm deep of melamine wrapped finish complete	No	1		
15	Counter top as per design detail 600mm deep of melamine wrapped finish complete	No	1		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 6 Carpentry and Joinery				

Section No. 6				
Bill No. 6				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		110		
		111		
		112		
<b>Carried Forward to Summary of Section No. 6</b>				
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 6 Carpentry and Joinery				

R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p>				
1	Ceilings nailed-up not exceeding 1m below roof trusses	m2	129		
2	extra over for expended mesh wire ceiling support	m2	32		
	<b>Carried to Collection</b>			R	
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 7 Ceilings, Partitions and Access Flooring				

Item No	Description	Unit	Quantity	Rate	Amount
3	<p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber brander shall be suitably fixed to the tie beam/joist.</u></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p>	m2	45		
4	Cornice	m	73		
<b>Carried to Collection</b>					R
<p>Section No. 6                  REFURB SCIENCE AND MULTIMEDIA CENTRE                  Bill No. 7                  Ceilings, Partitions and Access Flooring</p>					

Section No. 6					
Bill No. 7					
Ceilings, Partitions and Access Flooring					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		114			
		115			
<b>Carried Forward to Summary of Section No. 6</b>					
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 7 Ceilings, Partitions and Access Flooring				R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>On new screeded floors</p>	m2	129		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 6</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 8 Floor Coverings, Wall Linings, etc.</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p><b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop, size 24 x 45mm, 2 x UNION two ball bearing butt hinge Stainless Steel finish, 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	6		
2	Stainless Steel floor mounted door stop, size 24 x 45mm, 2 x UNION two ball bearing butt hinge Stainless Steel finish, 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	2		
3	4 x UNION two ball bearing butt hinge with Stainless Steel finish, 4 x lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 9 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>DOOR CLOSERS</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p>Door closer</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6                      REFURB SCIENCE AND MULTIMEDIA CENTRE                      Bill No. 9                      Ironmongery</p>	No	2		<p style="text-align: right;">R</p>

Section No. 6					
Bill No. 9					
Ironmongery					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		118			
		119			
<b>Carried Forward to Summary of Section No. 6</b>					
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 9 Ironmongery				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6                      REFURB SCIENCE AND MULTIMEDIA CENTRE                      Bill No. 10                      Metalwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p>STEEL STAIRS</p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Rebated frames suitable for half brick walls with hinges</u></b></p> <p>1 Frame for 813 x 2032 x 40mm door</p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls with 1 pair of hinges</u></b></p> <p>2 Frame for 813 x 2032 x 40mm door</p> <p><u>Preparation of frames for fixing of ironmongery</u></p> <p>3 Arm of door closer</p> <p><b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b></p> <p><b><u>Standard school windows</u></b></p> <p>4 Top hung standard steel window, finished in Grey oxide primer size 889mm x 854mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant</p>	No	2		
		No	1		
		No	1		
		No	4		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 10 Metalwork				

Section No. 6					
Bill No. 10					
Metalwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		121			
		122			
<b>Carried Forward to Summary of Section No. 6</b>					
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 10 Metalwork				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b> <b><u>BILL NO. 11</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 11 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self levelling Screeds on concrete</u></b></p>				
1	30mm Thick screed on floors and landings	m2	129		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	224		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 11 Plastering</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
3	<p><b><u>EXTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p> <p>On walls</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6                      REFURB SCIENCE AND MULTIMEDIA CENTRE                      Bill No. 11                      Plastering</p>	m2	32		
					R

Section No. 6				
Bill No. 11				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		124		
		125		
		126		
<b>Carried Forward to Summary of Section No. 6</b>				
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 11 Plastering				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>General</u></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p> <p>As-built drawings</p> <p><b><u>SANITARYWARE</u></b></p> <p>1 Sanitary ware ceramic fireclay 585 x 435 mm hospital basin, including ¼ turns wrist action mixer, c.p. waste, overflow tube. Two fixing screws, plugs and c.p. caps. Supplied with two tapholes. with two MEDICAL Pillar taps elbow action. 1/2" BSP MI SANS 226 TYPE 2.</p> <p><b><u>SOIL DRAINAGE</u></b></p> <p><u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u></p> <p>2 50mm Waste pipe</p> <p>3 50mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete</p> <p>4 T Junction</p> <p>5 Brick sewer manhole</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing &amp; Drainage (Provisional)</p>				
		No	13		
		m	17		
		m	34		
		No	9		
		No	1		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
6	Gulley	No	4		
7	Stub/vent valve	No	4		
8	Testing water pipe system		Item		
<b><u>WATER SUPPLY</u></b>					
<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>					
9	22mm Pipes	m	30		
10	22mm Pipes chased into brickwork including brown paper lagging	m	15		
11	Testing water pipe system		Item		
<b>Carried to Collection</b>					R
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing & Drainage (Provisional)					

Section No. 6				
Bill No. 12				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		128		
		129		
		130		
		131		
		132		
<b>Carried Forward to Summary of Section No. 6</b>				
Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 12 Plumbing & Drainage (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5mm<sup>2</sup></u></b>  <b><u>All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	7		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 6</b></p> <p>Section No. 6                      REFURB SCIENCE AND MULTIMEDIA CENTRE                      Bill No. 13                      Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b>  <b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 6  REFURB SCIENCE AND MULTIMEDIA CENTRE  Bill No. 14  Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	224		
2	On external walls	m2	32		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
3	On ceilings	m2	129		
4	On cornice not exceeding 300mm girth	m	73		
	<b><u>ON FASCIA BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to fascia board. One coat Primer and finish with two coats Acrylic PVA</u></b>				
5	On fascia board	m2	32		
	<b><u>ON NUTEC</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
6	On external ceilings	m2	45		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
7	On door frames	m2	1		
	<b>Carried to Collection</b>				
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 14 Paintwork				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
8	On window frames  <b><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>	m2	14		
9	On door frames	m2	19		
10	On doors  <b><u>ON WOOD</u></b>  <b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>	m2	1		
11	On doors	m2	19		
12	On skirtings  <b><u>Painted with carbolineum paint on exposed timber</u></b>	m	73		
13	On exposed trusses	m2	21		
	<b>Carried to Collection</b>				R
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE Bill No. 14 Paintwork				



	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE			
<b>Bill No</b>	<b>SECTION SUMMARY - REFURB SCIENCE AND MULTIMEDIA CENTRE</b>	<b>Page No</b>		<b>Amount</b>
1	Earthworks (Provisional)	98		
2	Concrete Formwork & Reinforcement	103		
3	Masonry	107		
4	Waterproofing	108		
5	Roof Coverings, Claddings, etc.	109		
6	Carpentry and Joinery	113		
7	Ceilings, Partitions and Access Flooring	116		
8	Floor Coverings, Wall Linings, etc.	117		
9	Ironmongery	120		
10	Metalwork	123		
11	Plastering	127		
12	Plumbing & Drainage (Provisional)	133		
13	Glazing	134		
14	Paintwork	138		
	<b>Carried to Final Summary</b>		R	
	Section No. 6 REFURB SCIENCE AND MULTIMEDIA CENTRE			



Item No	Description	Unit	Quantity	Rate	Amount
<b><u>BATHROOM FITTINGS</u></b>					
<b><u>Manufactured by Franke or equally approved</u></b>					
4	San 009 - WASTE BIN Waste container - 1,25mm thick 18/10 satin stainless steel perforated waste containers, size 380x410x205mm deep, with 180 degree radius front and perforated facia pattern, waste bin capacity of 23 litres, with lock, plugged and screwed to the wall with stainless steel screws	No	8		
5	San 007 - SOAP DISPENSER Standard stainless steel wall mounted soap dispenser	No	4		
<b>Carried to Collection</b>					R
Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 1 Ironmongery					

Section No. 7				
Bill No. 1				
Ironmongery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		140		
		141		
<b>Carried Forward to Summary of Section No. 7</b>				
Section No. 7				
EXISTING ABLUTIONS (Male)				
Bill No. 1				
Ironmongery				

R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b> <b><u>BILL NO. 2</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 2 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self Levelling Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	35		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	222		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 2 Plastering</p>			R	

Section No. 7					
Bill No. 2					
Plastering					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		143			
		144		-----	
				-----	
<b>Carried Forward to Summary of Section No. 7</b>				R	
Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 2 Plastering					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>Ceramic tiles size 100 x 200mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>1 On walls m2 148</p> <p>2 Skirting tile 75mm max high m 141</p> <p>3 On sills m 20</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 3 Tiling</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>FLOOR TILING</u></b></p> <p><b><u>Ceramic tiles size 300 x 300mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>On floors and landings</p>	m2	35		
<b>Carried to Collection</b>					R
<p>Section No. 7                  EXISTING ABLUTIONS (Male)                  Bill No. 3                  Tiling</p>					

Section No. 7 Bill No. 3 Tiling <b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b> 146		<b>Amount</b>	
		147		-----	
				-----	
<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 7</b></p>				R	
Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 3 Tiling					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 7                  EXISTING ABLUTIONS (Male)                  Bill No. 4                  Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 7  EXISTING ABLUTIONS (Male)  Bill No. 4  Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p>Laying, backfilling, bedding, etc of pipes</p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 4 Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>General</u></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p> <p><u>As-built drawings</u></p> <p><b><u>SANITARYWARE</u></b></p> <p>1 SANITARYWARE 565 x 275 x 310mm White vitreous china wall mounted back inlet urinal including 38mm chromium plated domical grating and chromium plated back inlet spreader and urinal division fixed with and including fixing screws and hanger brackets.</p> <p>2 SANITARYWARE 310 x 610 x 140mm White vitreous china wall mounted urinal division fixed with and including fixing screws and hanger brackets.</p> <p><b><u>SOIL DRAINAGE</u></b></p> <p><u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u></p> <p>3 50mm Waste pipe</p> <p>4 110mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 4 Plumbing &amp; Drainage (Provisional)</p>				
		No	6		
		No	6		
		m	23		
		m	11		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
5	T junction with inspection eye	No	8		
6	Brick sewer manhole	No	2		
7	Gulley	No	2		
8	Stub/vent valve	No	8		
9	Floor drain	No	2		
10	Testing		Item		
	<b><u>WATER SUPPLY</u></b>				
	<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>				
11	22mm Pipes	m	11		
12	22mm Pipes chased into brickwork including brown paper lagging	m	23		
13	Testing water pipe system		Item		
	<b>Carried to Collection</b>				R
	Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 4 Plumbing & Drainage (Provisional)				

Section No. 7				
Bill No. 4				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		149		
		150		
		151		
		152		
		153		
<b>Carried Forward to Summary of Section No. 7</b>				
Section No. 7				
EXISTING ABLUTIONS (Male)				
Bill No. 4				
Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b></p> <p><b><u>BILL NO. 5</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m<sup>2</sup> coated with monolithic glass All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>				
1	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b></p> <p><b><u>4mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges, fixed with double sided adhesive tape and silicone</u></b></p>	m2	7		
2	<p>450mm x 600mm High quality mirror complete with bevelled edges</p>	No	4		
	<p><b>Carried Forward to Summary of Section No. 7</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 5 Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b> <b><u>BILL NO. 6</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 6 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	222		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	35		
3	On cornice not exceeding 300mm girth	m	71		
	<b><u>ON NUTEC CEILING</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On external ceiling	m2	30		
	<b><u>ON FASCIA BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to fascia board. One coat Primer and finish with two coats Acrylic PVA</u></b>				
5	On fascia board	m2	10		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On door frames	m2	1		
7	On window frames	m2	5		
	<b>Carried to Collection</b>				
	Section No. 7 EXISTING ABLUTIONS (Male) Bill No. 6 Paintwork				
				R	



Section No. 7				
Bill No. 6				
Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		156		
		157		
		158		
<b>Carried Forward to Summary of Section No. 7</b>				
Section No. 7				
EXISTING ABLUTIONS (Male)				
Bill No. 6				
Paintwork				

R



Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p>				
1	<p>stainless steel indicator bolts with Stainless Steel finish, 2 x UNION two ball bearing butt hinge with Stainless Steel finish. Stainless Steel 152 x 76mm push plate, Wall mounted door stop</p>	No	12		
	<p><b><u>PUSH PLATES AND KICK PLATES</u></b></p> <p><b><u>2mm Thick anodised aluminium plates countersunk screwed along edges at not exceeding 200mm centres</u></b></p>				
2	<p>813 x 250mm Kick plate</p>	No	20		
	<p><b><u>DOOR CLOSERS</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p>				
3	<p>Door closer</p>	No	2		
	<b>Carried to Collection</b>				R
	<p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 1 Ironmongery</p>				

Item No	Description	Unit	Quantity	Rate	Amount
<b><u>BATHROOM FITTINGS</u></b>					
<b><u>Manufactured by Franke or equally approved</u></b>					
4	San 009 - WASTE BIN Waste container - 1,25mm thick 18/10 satin stainless steel perforated waste containers, size 380x410x205mm deep, with 180 degree radius front and perforated facia pattern, waste bin capacity of 23 litres, with lock, plugged and screwed to the wall with stainless steel screws	No	8		
5	San 007 - SOAP DISPENSER Standard stainless steel wall mounted soap dispenser	No	6		
<b>Carried to Collection</b>					R
Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 1 Ironmongery					

Section No. 8					
Bill No. 1					
Ironmongery					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		161			
		162			
<b>Carried Forward to Summary of Section No. 8</b>				R	
Section No. 8					
EXISTING ABLUTIONS (Female)					
Bill No. 1					
Ironmongery					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b> <b><u>BILL NO. 2</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 2 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self Levelling Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	35		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	222		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 2 Plastering</p>			R	

Section No. 8				
Bill No. 2				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		164		
		165		
<b>Carried Forward to Summary of Section No. 8</b>				
Section No. 8				
EXISTING ABLUTIONS (Female)				
Bill No. 2				
Plastering				

R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>Ceramic tiles size 100 x 200mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>1 On walls m2 148</p> <p>2 Skirting tile 75mm max high m 141</p> <p>3 On sills m 20</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 3 Tiling</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>FLOOR TILING</u></b></p> <p><b><u>Ceramic tiles size 300 x 300mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>On floors and landings</p>	m2	35		
<b>Carried to Collection</b>					R
<p>Section No. 8  EXISTING ABLUTIONS (Female)  Bill No. 3  Tiling</p>					

Section No. 8 Bill No. 3 Tiling <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 167		<b>Amount</b>
		168		-----
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<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 8</b></p>			R	
Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 3 Tiling				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 8                      EXISTING ABLUTIONS (Female)                      Bill No. 4                      Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 4 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p><u>Water pipework is to be disinfected at completion</u></p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 8  EXISTING ABLUTIONS (Female)  Bill No. 4  Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>General</u></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p> <p><u>As-built drawings</u></p> <p><b><u>SANITARYWARE</u></b></p> <p>1 Close coupled raised height WC pan, 75cm projection with floor fixing kit, close coupled delay fill, syphon cistern 4.5 litre single flush for 75cm projection pan, secure cover fastener, no lever. Seat and cover, top fixing hinges. Spatula cistern lever close coupled. Plumbing, 20mm Brushed chrome Econoflush front access junior concealed toilet flush master with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flush pipes, elbow and pan connector).</p> <p>2 Sanitaryware vitreous china 510mm x 405mm rounded Hibiscus basin with one or two tap hole, including integrated overflow and chain stay hole. Bolted to wall with 2x 10mm bolts. Basin Mixer single lever with pop up waste. 1_ 2" BSP female inlets. SANS 1480\ Paraplegic Toilets to be fitted with two MEDICAL Pillar taps elbow action. 1/2" BSP MI SANS 226 TYPE 2.</p>				
	<b>Carried to Collection</b>				R
	Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 4 Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SOIL DRAINAGE</u></b>				
	<u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u>				
3	50mm Waste pipe	m	23		
4	110mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete	m	11		
5	T junction with inspection eye	No	8		
6	Brick sewer manhole	No	2		
7	Gulley	No	2		
8	Stub/vent valve	No	8		
9	Floor drain	No	2		
10	Testing		Item		
	<b><u>WATER SUPPLY</u></b>				
	<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>				
11	22mm Pipes	m	11		
12	22mm Pipes chased into brickwork including brown paper lagging	m	23		
13	Testing water pipe system		Item		
	<b>Carried to Collection</b>				
	Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 4 Plumbing & Drainage (Provisional)				
				R	

Section No. 8				
Bill No. 4				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		170		
		171		
		172		
		173		
		174		
<b>Carried Forward to Summary of Section No. 8</b>				
Section No. 8				
EXISTING ABLUTIONS (Female)				
Bill No. 4				
Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b></p> <p><b><u>BILL NO. 5</u></b></p> <p><b><u>GLAZING</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m<sup>2</sup> coated with monolithic glass All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>				
1	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b></p> <p><b><u>4mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges, fixed with double sided adhesive tape and silicone</u></b></p>	m2	7		
2	<p>450mm x 600mm high quality mirror complete with bevelled edges</p>	No	4		
	<p><b>Carried Forward to Summary of Section No. 8</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 5 Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 8</u></b> <b><u>BILL NO. 6</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 6 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	222		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	35		
3	On cornice not exceeding 300mm girth	m	71		
	<b><u>ON NUTEC CEILING</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On external ceiling	m2	30		
	<b><u>ON FASCIA BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to fascia board. One coat Primer and finish with two coats Acrylic PVA</u></b>				
5	On fascia board	m2	10		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On door frames	m2	1		
7	On window frames	m2	5		
	<b>Carried to Collection</b>				
	Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 6 Paintwork				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
8	Gutters and downpipes  <b><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>	m2	12		
9	On doors	m2	5		
10	On door frames  <b><u>ON WOOD</u></b>  <b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>	m2	2		
11	On doors	m2	10		
	<b>Carried to Collection</b>				R
	Section No. 8 EXISTING ABLUTIONS (Female) Bill No. 6 Paintwork				

Section No. 8					
Bill No. 6					
Paintwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		177			
		178		-----	
		179		-----	
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<b>Carried Forward to Summary of Section No. 8</b>				R	
Section No. 8					
EXISTING ABLUTIONS (Female)					
Bill No. 6					
Paintwork					

Bill No	<u>SECTION SUMMARY - EXISTING ABLUTIONS (Female)</u>	Page No	Amount
	Section No. 8 EXISTING ABLUTIONS (Female)		
	<b>SECTION SUMMARY - EXISTING ABLUTIONS (Female)</b>		
1	Ironmongery	163	
2	Plastering	166	
3	Tiling	169	
4	Plumbing & Drainage (Provisional)	175	
5	Glazing	176	
6	Paintwork	180	
	<b>Carried to Final Summary</b>		
	Section No. 8 EXISTING ABLUTIONS (Female)		
			R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches and holes</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
		m2	46		
		m3	25		
		m3	2		
		m3	1		
		m3	19		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	46		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	In prescribed stock piles on site	m3	6		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
9	Under surface beds in 150mm layer	m3	7		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 1 Earthworks (Provisional)			R	



Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>				
	<b>Carried to Collection</b>				
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 2 Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	2		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Strip footings	m3	7		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
3	Surface beds on waterproofing (including thickenings)	m3	5		
	<p><b><u>TEST CUBES</u></b></p>				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
5	<u>Finishing top surfaces of concrete smooth with a steel trowel</u> Surface beds, slabs, etc to falls	m2	42		
6	<u>Finishing top surfaces of concrete smooth with a wood float</u> Surface beds, slabs, etc to falls and currents	m2	20		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	32		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
8	Not exceeding 300mm high to edges of surface beds	m	78		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
9	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	25		
10	3 x 40mm Saw-cut joints in top of concrete	m	10		
	<b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b>				
11	Surface beds not exceeding 300mmm thick as per engineers details	m	10		
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>				
12	Y10mm Diameter bars	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
13	Y8mm Diameter bars  <b><u>Fabric reinforcement</u></b>	t	1.00		
14	Type 193 fabric reinforcement in concrete surface beds etc	m2	42		
<b>Carried to Collection</b>					R
Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 2 Concrete Formwork & Reinforcement					

Section No. 9					
Bill No. 2					
Concrete Formwork & Reinforcement					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		186			
		187		-----	
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		189		-----	
<b>Carried Forward to Summary of Section No. 9</b>				R	
Section No. 9					
NEW HOD BLOCK 1 (double)					
Bill No. 2					
Concrete Formwork & Reinforcement					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	90		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	5		
3	Half brick walls in beamfilling	m2	5		
4	One brick walls	m2	64		
	<p><b><u>Steel bar reinforcement</u></b></p>				
5	8mm Diameter mild steel bars built in horizontally	t	1.00		
6	8mm Diameter high tensile steel bars built in horizontally	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>				
7	75 x 110mm Lintels in lengths not exceeding 3m	m	10		
8	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
9	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m	m	10		
	<b><u>Turning pieces to lintels etc</u></b>				
10	220mm Wide turning pieces	m	5		
	<b><u>Air bricks etc</u></b>				
11	229 x 152mm Terracotta vermin proof air brick	No	4		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>				
12	Extra over brickwork for face brickwork for one side of one brick wall	m2	268		
13	Extra over brickwork for face brickwork for one side of one brick wall internally up to 900mm high above FFL	m2	81		
14	Extra over brickwork for face brickwork for 330mm x 330mm brick column @ 3.34m high	No	2		
15	Extra over face brickwork both sides of one brick wall	m2	26		
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
16	220mm Copings on top of one brick walls	m	5		
17	Facebrick concrete lintel	m	15		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
18	<p><b><u>WINDOW SILLS</u></b></p> <p><b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b></p> <p>110mm Facebrick window sills flat and slightly projecting</p>	m	235		
<b>Carried to Collection</b>					R
<p>Section No. 9                  NEW HOD BLOCK 1 (double)                  Bill No. 3                  Masonry</p>					

Section No. 9					
Bill No. 3					
Masonry					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		191			
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<b>Carried Forward to Summary of Section No. 9</b>				R	
Section No. 9					
NEW HOD BLOCK 1 (double)					
Bill No. 3					
Masonry					

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 9</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	19		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	42		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	78		
	<b>Carried Forward to Summary of Section No. 9</b>				
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 9</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	53		
2	Side cladding n.e 250mm	m2	4		
3	Gable end side cladding n.e 250mm	m2	3		
4	Ridge or Valley flashing	m	9		
5	Ridge Closer	m	9		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
6	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	43		
	<b>Carried Forward to Summary of Section No. 9</b>				
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 5 Roof Coverings, Claddings, etc.			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p>				
	<b>Carried to Collection</b>				
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 6 Carpentry and Joinery			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 9.5 x 8.04m overall on plan x 1.423m high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	24		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	53		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	23		
5	250 x 20mm Barge boards	m	15		
6	250 x 20mm Fascias	m	24		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
	<b><u>DOORS ETC</u></b>				
7	813 x 345mm Fanlight and 813 x 2032 x 40mm solid core flush masonite panel door, 6.4mm clear fixed glazing on fanlight	No	2		
8	813 x 2032 x 40mm Solid core flush masonite panel door	No	2		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>JOINERY SUNDRIES</u></b></p> <p><b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b></p> <p><b><u>Wrought Meranti or similar</u></b></p>				
9	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	2		
	<p><b><u>White boards</u></b></p>				
10	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, fixed to plastered walls	No	4		
	<p><b><u>Fire extinguisher boards</u></b></p>				
11	20mm Backboards for 4,5kg fire extinguishers plugged to wall	No	2		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 6 Carpentry and Joinery				

Section No. 9					
Bill No. 6					
Carpentry and Joinery					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		198			
		199			
		200			
<b>Carried Forward to Summary of Section No. 9</b>				R	
Section No. 9					
NEW HOD BLOCK 1 (double)					
Bill No. 6					
Carpentry and Joinery					

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 9</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 7 Ceilings, Partitions and Access Flooring</p>	m2	43		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p> <p>Cornice</p> <p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine branderling at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber branderling shall be suitably fixed to the tie beam/joist.</u></p>	m	53		
3	External nailed-up ceiling	m2	11		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 7 Ceilings, Partitions and Access Flooring</p>			R	

Section No. 9  Bill No. 7  Ceilings, Partitions and Access Flooring  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 202		<b>Amount</b>
		203		-----
				-----
<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 9</b></p>			R	
Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 7 Ceilings, Partitions and Access Flooring				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc FLOOR COVERINGS</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
1	On new screeded floors	m2	43		
	<p><b><u>Fully flexible vinyl floor skirting 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
2	100mm High skirting	m	14		
	<p><b>Carried Forward to Summary of Section No. 9</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 8 Floor Coverings, Wall Linings, etc.</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p><b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	2		
2	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	2		
	<b>Carried Forward to Summary of Section No. 9</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 9 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>STRUCTURAL STEELWORK</u></b></p> <p><b><u>STRUCTURAL STEELWORK</u></b></p> <p>Consideration is to be given in specific applications (e.g. where "heavy" steel structures such as in industrial plants, towers for mine shafts, etc are dominant) to implement the principles laid down by the "Measurement for Structural Steelwork" as prepared and recommended by the South African Institute of Steel Construction or any other appropriate principles This bill is, however, based on the building work measuring system Finishing-off painting is to be included in this trade only when the structural steel contractor is required to execute the work</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><b><u>STEEL COLUMNS AND BEAMS</u></b></p> <p><b><u>Welded beams and purlins etc. with flat bearer and connection plates, bolted to steel</u></b></p> <p>60 x 60mm SHS stanchions</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 9</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 10 Structural Steelwork</p>	t	1.00		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 11</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 11 Metalwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><b>STEEL STAIRS</b></p> <p><b><u>DOORS, WINDOWS, CURTAIN WALLING, SHOPFRONTS, ETC</u></b></p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls with 1 pair of hinges</u></b></p>				
1	Frame for 813 x 2032 x 40mm door and fixed fanlight 235mm high	No	2		
2	Frame for 813 x 2032 x 40mm door	No	2		
	<p><b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b></p> <p><b><u>Standard school windows</u></b></p>				
3	Top hung standard steel window, finished in Grey oxide primer size 889mm x 854mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	8		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 11 Metalwork				

Section No. 9					
Bill No. 11					
Metalwork					
<b><u>COLLECTION</u></b>					
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NEW HOD BLOCK 1 (double)					
Bill No. 11					
Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 12 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self levelling Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	42		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	128		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 12 Plastering				

Section No. 9					
Bill No. 12					
Plastering					
<b><u>COLLECTION</u></b>					
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<b>Carried Forward to Summary of Section No. 9</b>					
Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 12 Plastering				R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 9</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5mm All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	7		
	<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 9</b></p> <p>Section No. 9                      NEW HOD BLOCK 1 (double)                      Bill No. 13                      Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 9</u></b>  <b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 9                      NEW HOD BLOCK 1 (double)                      Bill No. 14                      Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	128		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	43		
3	On cornice not exceeding 300mm girth	m	53		
	<b><u>ON NUTEC</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On ceilings	m2	11		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
5	On door frames	m2	4		
6	On window frames	m2	14		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 14 Paintwork				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
7	On doors	m2	20		
	<b><u>Painted with Carbolineum paint as per architects specification</u></b>				
8	On exposed trusses	m2	10		
	<b>Carried to Collection</b>				R
	Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 14 Paintwork				

Section No. 9				
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Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
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		216		
		217		
<b>Carried Forward to Summary of Section No. 9</b>				
Section No. 9 NEW HOD BLOCK 1 (double) Bill No. 14 Paintwork			R	



Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10                      NEW HOD BLOCK 4 (single)                      Bill No. 1                      Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches and holes</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
		m2	23		
		m3	13		
		m3	1		
		m3	1		
		m3	10		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	23		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	In prescribed stock piles on site	m3	3		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
9	Under surface beds in 150mm layer	m3	4		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 1 Earthworks (Provisional)				
				R	

Section No. 10					
Bill No. 1					
Earthworks (Provisional)					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
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Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 1 Earthworks (Provisional)					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 10                      NEW HOD BLOCK 4 (single)                      Bill No. 2                      Concrete Formwork &amp; Reinforcement</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p> <p>1 Surface blinding under footings and bases</p> <p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p> <p>2 Strip footings</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>				
	<b><u>25MPa/19mm concrete</u></b>				
3	Surface beds on waterproofing (including thickenings)	m3	3		
	<b><u>TEST CUBES</u></b>				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
5	Surface beds, slabs, etc to falls	m2	21		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
6	Surface beds, slabs, etc to falls and currents	m2	10		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	16		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
8	Not exceeding 300mm high to edges of surface beds	m	39		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
9	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	10		
10	3 x 40mm Saw-cut joints in top of concrete	m	5		
	<b>Carried to Collection</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 2 Concrete Formwork & Reinforcement				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
11	<p><b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b></p> <p>Surface beds not exceeding 300mmm thick as per engineers details</p>	m	5		
	<p><b><u>REINFORCEMENT</u></b></p>				
	<p><b><u>High tensile steel reinforcement to structural concrete work</u></b></p>				
12	Y10mm Diameter bars	t	1.00		
13	Y8mm Diameter bars	t	1.00		
	<p><b><u>Fabric reinforcement</u></b></p>				
14	Type 193 fabric reinforcement in concrete surface beds etc	m2	21		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 2 Concrete Formwork &amp; Reinforcement</p>			R	

Section No. 10				
Bill No. 2				
Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		224		
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<b>Carried Forward to Summary of Section No. 10</b>				
Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 2 Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	90		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls in beamfilling	m2	3		
3	One brick walls	m2	50		
	<p><b><u>Steel bar reinforcement</u></b></p>				
4	8mm Diameter mild steel bars built in horizontally	t	1.00		
5	8mm Diameter high tensile steel bars built in horizontally	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>				
6	75 x 110mm Lintels in lengths not exceeding 3m	m	10		
7	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
8	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m	m	10		
	<b><u>Turning pieces to lintels etc</u></b>				
9	220mm Wide turning pieces	m	5		
	<b><u>Air bricks etc</u></b>				
10	229 x 152mm Terracotta vermin proof air brick	No	4		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>				
11	Extra over brickwork for face brickwork for one side of one brick wall	m2	268		
12	Extra over brickwork for face brickwork for one side of one brick wall internally up to 900mm high above FFL	m2	81		
13	Extra over face brickwork both sides of one brick wall	m2	26		
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
14	220mm Copings on top of one brick walls	m	5		
15	Facerbrick concrete lintel	m	8		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
16	<p><b><u>WINDOW SILLS</u></b></p> <p><b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b></p> <p>110mm Facebrick window sills flat and slightly projecting</p>	m	235		
<b>Carried to Collection</b>					R
Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 3 Masonry					

Section No. 10				
Bill No. 3				
Masonry				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		229		
		230		
		231		
		232		
<b>Carried Forward to Summary of Section No. 10</b>				
Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 3 Masonry			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 10</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	19		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	21		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	39		
	<b>Carried Forward to Summary of Section No. 10</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 10</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	27		
2	Side cladding n.e 250mm	m2	2		
3	Gable end side cladding n.e 250mm	m2	2		
4	Ridge or Valley flashing	m	4		
5	Ridge Closer	m	4		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
6	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	21		
	<b>Carried Forward to Summary of Section No. 10</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 5 Roof Coverings, Claddings, etc.			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trussesRoof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 6 Carpentry and Joinery</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 8.5 x 3.6m overall on plan x 1.842m high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	16		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	27		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	22		
5	250 x 20mm Barge boards	m	4		
6	250 x 20mm Fascia's	m	4		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
	<b><u>DOORS ETC</u></b>				
7	813 x 345mm Fanlight and 813 x 2032 x 40mm solid core flush masonite panel door, 6.4mm clear fixed glazing on fanlight	No	1		
8	813 x 2032 x 40mm Solid core flush masonite panel door	No	1		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>JOINERY SUNDRIES</u></b></p> <p><b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b></p> <p><b><u>Wrought Meranti or similar</u></b></p>				
9	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	1		
	<p><b><u>White boards</u></b></p>				
10	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, fixed to plastered walls	No	2		
	<b>Carried to Collection</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 6 Carpentry and Joinery				R

Section No. 10					
Bill No. 6					
Carpentry and Joinery					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		236			
		237		-----	
		238		-----	
<b>Carried Forward to Summary of Section No. 10</b>				R	
Section No. 10					
NEW HOD BLOCK 4 (single)					
Bill No. 6					
Carpentry and Joinery					

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 10</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brander at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heads. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 7 Ceilings, Partitions and Access Flooring</p>	m2	21		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p> <p>Cornice</p> <p><u>On Nutec</u></p> <p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine branderling at 400mm centres in one direction, ceiling screws at 150mm c/c to timber at max 400mm c/c to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber branderling shall be suitably fixed to the tie beam/joist.</u></p>	m	27		
3	External nailed-up ceiling	m2	6		
<b>Carried to Collection</b>					R
<p>Section No. 10                  NEW HOD BLOCK 4 (single)                  Bill No. 7                  Ceilings, Partitions and Access Flooring</p>					

Section No. 10  Bill No. 7  Ceilings, Partitions and Access Flooring  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 240		<b>Amount</b>
		241		-----
				-----
<p align="center"><b>Carried Forward to Summary of Section No. 10</b></p>			R	
Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 7 Ceilings, Partitions and Access Flooring				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><b><u>Fixing</u></b></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
1	On new screeded floors	m2	21		
	<p><b><u>Fully flexible vinyl floor skirting 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
2	100mm High skirting	m	27		
	<p><b>Carried Forward to Summary of Section No. 10</b></p>				
	<p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 8 Floor Coverings, Wall Linings, etc.</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p>Measured per door</p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
2	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
	<b>Carried Forward to Summary of Section No. 10</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 9 Ironmongery			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>STRUCTURAL STEELWORK</u></b></p> <p>Consideration is to be given in specific applications (e.g. where "heavy" steel structures such as in industrial plants, towers for mine shafts, etc are dominant) to implement the principles laid down by the "Measurement for Structural Steelwork" as prepared and recommended by the South African Institute of Steel Construction or any other appropriate principles This bill is, however, based on the building work measuring system Finishing-off painting is to be included in this trade only when the structural steel contractor is required to execute the work</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><b><u>STEEL COLUMNS AND BEAMS</u></b></p> <p><b><u>Welded beams and purlins etc. with flat bearer and connection plates, bolted to steel</u></b></p> <p>60 x 60mm SHS stanchions</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 10</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 10 Structural Steelwork</p>	t	1.00		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 11</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work: 1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 10                      NEW HOD BLOCK 4 (single)                      Bill No. 11                      Metalwork</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p>				
1	Frame for 813 x 2032 x 40mm door and fixed fanlight 235mm high	No	1		
2	Frame for 813 x 2032 x 40mm door	No	1		
	<p><b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b></p> <p><b><u>Standard school windows</u></b></p>				
3	Top hung standard steel window, finished in Grey oxide primer size 889mm x 854mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	4		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 11 Metalwork				

Section No. 10				
Bill No. 11				
Metalwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		246		
		247		
<b>Carried Forward to Summary of Section No. 10</b>				
Section No. 10				
NEW HOD BLOCK 4 (single)				
Bill No. 11				
Metalwork			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 12 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self levelling Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	21		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	64		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 12 Plastering</p>			R	

Section No. 10					
Bill No. 12					
Plastering					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		249			
		250			
<b>Carried Forward to Summary of Section No. 10</b>					
Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 12 Plastering				R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 10</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>GLAZING</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5mm All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p> <p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	4		
	<p><b>Carried Forward to Summary of Section No. 10</b></p> <p>Section No. 10                      NEW HOD BLOCK 4 (single)                      Bill No. 13                      Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 10</u></b> <b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 14 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	64		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	21		
3	On cornice not exceeding 300mm girth	m	27		
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On ceilings	m2	6		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
5	On window frames	m2	7		
	<b><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On door frames	m2	1		
	<b>Carried to Collection</b>				
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 14 Paintwork				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
7	On doors	m2	4		
	<b><u>Painted with Carbolineum paint as per architects specification</u></b>				
8	On exposed trusses	m2	21		
	<b>Carried to Collection</b>				R
	Section No. 10 NEW HOD BLOCK 4 (single) Bill No. 14 Paintwork				

Section No. 10					
Bill No. 14					
Paintwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		253			
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<b>Carried Forward to Summary of Section No. 10</b>				R	
Section No. 10 NEW HOD BLOCK 4 (single)					
Bill No. 14					
Paintwork					



Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11                  ADMIN &amp; ADMIN BLOCK EXTENSION                  Bill No. 1                  Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note				
	When no information regarding density and other tests is available the following preamble in respect of testing may be inserted				
	<u>Testing</u>				
	Prices for filling are to include for all necessary density and other tests				
	<b><u>Site clearance</u></b>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	34		
	<b><u>EXCAVATION, FILLING, ETC</u></b>				
	<b><u>Excavation in earth not exceeding 2m deep</u></b>				
2	Trenches & holes	m3	42		
	<b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b>				
3	Soft rock	m3	2		
4	Hard rock	m3	1		
	<b><u>Extra over all excavations for carting away</u></b>				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	29		
	<b><u>Keeping excavations free of water</u></b>				
6	Keeping excavations free of water other than subterranean water		Item		
	<b>Carried to Collection</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 1 Earthworks (Provisional)				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
7	In prescribed stock piles on site to trenches and holes	m3	29		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
8	Under surface beds in 150mm layer	m3	5		
	<b><u>Compaction of surfaces</u></b>				
9	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density TESTS	m2	10		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	1		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	1		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 1 Earthworks (Provisional)				

Section No. 11				
Bill No. 1				
Earthworks (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		258		
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<b>Carried Forward to Summary of Section No. 11</b>				
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ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 1				
Earthworks (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m3 for the top 50mm and 400kg/m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	2		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Strip footing	m3	13		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
3	Surface beds on waterproofing (including thickenings)	m3	4		
4	Ramps	m3	1		
5	Ring Beams or Isolated beams	m3	1		
6	Slabs including beams and inverted beams	m3	2		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>TEST CUBES</u></b>				
7	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	4		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
8	Surface beds, slabs, etc to falls	m2	9		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
9	Surface beds, slabs, etc to falls and currents	m2	104		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	124		
	<b><u>PERMANENT FORMWORK</u></b>				
11	Specialist permanent BondLoc formwork to soffit of slabs	m2	10		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
12	Not exceeding 300mm high to edges of surface beds	m	124		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
13	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	20		
14	3 x 40mm Saw-cut joints in top of concrete	m	26		
	<b>Carried to Collection</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 2 Concrete Formwork & Reinforcement				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b>				
15	Surface beds not exceeding 300mmm thick as per engineers details	m	16		
	<b><u>Scabbling</u></b>				
16	Scabble edges of existing concrete and apply wet-to-dry epoxy agent on edges	m2	62		
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>				
17	Y10mm Diameter bars	t	1.00		
18	Y8mm Diameter bars	t	1.00		
	<b><u>High tensile steel dowel bars</u></b>				
19	10mm Diameter dowel bar 400mm long with one end embedded 200mm deep in side of concrete and other end cast in new concrete, including filling with ABE epidermix or similar approved	No	182		
	<b><u>Fabric reinforcement</u></b>				
20	Type 193 fabric reinforcement in concrete surface beds etc	m2	104		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 2 Concrete Formwork & Reinforcement				

Section No. 11				
Bill No. 2				
Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
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<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 2				
Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	46		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	90		
3	Half brick walls in beamfilling	m2	26		
4	One brick walls	m2	96		
5	330 x 330mm Brick square brick piers in height 3.34m	No	13		
	<p><b><u>Steel bar reinforcement</u></b></p>				
6	8mm Diameter mild steel bars built in horizontally	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
7	8mm Diameter high tensile steel bars built in horizontally  <b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>	t	1.00		
8	75 x 110mm Lintels in lengths not exceeding 3m	m	10		
9	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
10	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m  <b><u>Turning pieces to lintels etc</u></b>	m	10		
11	220mm Wide turning pieces  <b><u>Air bricks etc</u></b>	m	12		
12	229 x 152mm Terracotta vermin proof air brick  <b><u>FACE BRICKWORK</u></b>  <b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>	No	2		
13	Extra over brickwork for face brickwork for one side of one brick wall	m2	10		
14	Extra over brickwork for face brickwork for one side of one brick wall internally up to 900mm high above FFL	m2	24		
15	Extra over face brickwork both sides of one brick wall  <b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>	m2	74		
16	220mm Copings on top of one brick walls	m	40		
17	Face Brick lintels over windows and doors	m	20		
	<b>Carried to Collection</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 3 Masonry			R	

Item No	Description	Unit	Quantity	Rate	Amount
18	<p><b><u>WINDOW SILLS</u></b></p> <p><b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b></p> <p>110mm Facebrick window sills flat and slightly projecting</p>	m	20		
<b>Carried to Collection</b>					R
Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 3 Masonry					

Section No. 11				
Bill No. 3				
Masonry				
<b><u>COLLECTION</u></b>				
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<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 3				
Masonry			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 11</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	28		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	105		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	98		
	<b>Carried Forward to Summary of Section No. 11</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 11</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	75		
2	Side cladding n.e 250mm high	m2	5		
3	Gable end side cladding not exceeding 250mm	m2	2		
4	Ridge or Valley flashing	m	10		
5	Ridge Closer	m	10		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
6	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	60		
	<b>Carried Forward to Summary of Section No. 11</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 5 Roof Coverings, Claddings, etc.			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Trusses are at maximum 750mm centres</u></p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trussesRoof covering is type on purlins</p> <p><u>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</u></p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 6 Carpentry and Joinery</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 9.5 x 6.5m overall on plan x 1.893mm high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	26		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	100		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	135		
5	250 x 20mm Barge boards	m	7		
6	250 x 20mm Fascias	m	18		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
	<b><u>DOORS ETC</u></b>				
7	813 x 2032 x 40mm Solid core flush masonite panel door	No	5		
	<b><u>WINDOWS</u></b>				
	<b><u>Standard hardboard</u></b>				
8	10mm Duct covers in 100mm widths, fixed at 100mm centres along edges with chromium plated dome headed screws in cup washers	m2	27		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>JOINERY SUNDRIES</u></b>				
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>Wrought Meranti or similar</u></b>				
9	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	1		
	<b><u>White boards</u></b>				
10	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, full size magnetic porcelain with anodized trim and including tray and tackable map rail, fixed to plastered walls	No	1		
	<b><u>Fire extinguisher boards</u></b>				
11	20mm Backboards for 4,5kg fire extinguishers plugged to wall	No	2		
	<b><u>CUPBOARDS AND COUNTER TOP JOINERY TO KITCHENS, BEDROOMS, TOPS ETC</u></b>				
	<b><u>Counter Tops</u></b>				
	<b><u>Refer to Sediko - Sheet - DBSA-JBT-S1-ARCH-DWG100 New Admin - Plan &amp; Sections</u></b>				
12	Solid serving counter fixed to wall with brackets or similar including holes	No	1		
13	Granite counter top as per design detail of maximum depth 600mm and minimum 20mm thickness, fitted to wall on brackets - as per architecture details	No	1		
	<b>Carried to Collection</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 6 Carpentry and Joinery				
				R	

Section No. 11				
Bill No. 6				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		274		
		275		
		276		
<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 6				
Carpentry and Joinery				

R

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 11</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brandering at 400mm centres in one direction, ceiling screws at 150mm centre to centre timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 7 Ceilings, Partitions and Access Flooring</p>	m2	262		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Cornice, perimeter trims, etc to ceiling</u></b>				
	<b><u>Gypsum cornice, 75 x 75mm high</u></b>				
2	Cornice	m	276		
	<b><u>PARTITIONS</u></b>				
	<b><u>Partition System comprising 16mm thick panels, both sides Melamine &amp; edged with 22 x 22mm fixed with vertical aluminium channels plugged and fixed to pilasters. With continuous 25 x 25mm aluminium transom including ironmongery comprising of indicator bolts, hat and coat hooks, doors stops, toilet roll holders and rubber buffers.</u></b>				
3	Partitions 2000mm high	m	6		
4	Extra over partitions for T junctions	No	2		
5	Extra over partitions for vertical abutments	No	4		
6	Extra over partition for partition door 762 x 1762mm high framed including standard ironmongery	No	4		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 7 Ceilings, Partitions and Access Flooring				

Section No. 11  Bill No. 7  Ceilings, Partitions and Access Flooring  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 278		<b>Amount</b>
		279		-----
				-----
<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 11</b></p>				R
Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 7 Ceilings, Partitions and Access Flooring				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>1 On new screeded floors</p> <p><b><u>Fully flexible vinyl floor skirting 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>2 100mm High skirting</p>	m2	223		
	<p><b>Carried Forward to Summary of Section No. 11</b></p>			R	
	<p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 8 Floor Coverings, Wall Linings, etc.</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p><b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
2	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	4		
	<p><b><u>PUSH PLATES AND KICK PLATES</u></b></p> <p><b><u>2mm Thick anodised aluminium plates countersunk screwed along edges at not exceeding 200mm centres</u></b></p>				
3	813 x 250mm Kick plate	No	9		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 9 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>DOOR CLOSERS</u></b>				
	<b><u>Manufactured by Dorma or equally approved</u></b>				
4	Door closer	No	2		
	<b><u>BATHROOM FITTINGS</u></b>				
	<b><u>Manufactured by Franke or similar approved</u></b>				
5	San 002 - PARAPLEGIC LEFT HAND DOG RAIL Standard 300 x 300 X300 x 80mm Projecting dog leg side rail as by Stainless Steel Design	No	1		
6	San 004 - PARAPLEGIC BACK GRAB RAIL Standard 800 long x 150mm projecting straight disabled rail as by stainless steel design.	No	1		
7	San 006 - TOILET ROLL HOLDER Standard stainless steel wall mounted lockable toilet roll holder	No	6		
8	San 007 - SOAP DISPENSER Standard stainless steel wall mounted soap dispenser	No	2		
9	San 009 - WASTE BIN Waste container - 1,25mm thick 18/10 satin stainless steel perforated waste containers, size 380x410x205mm deep, with 180 degree radius front and perforated facia pattern, waste bin capacity of 23 litres, with lock, plugged and screwed to the wall with stainless steel screws	No	7		
10	San 010 - ROBE HOOK - chrome plated robe hook size 89 x 57mm wide, plugged and screwed to wall	No	7		
	<b><u>STEEL LOCKERS</u></b>				
	<b><u>Steel lockers with standard baked enamel finish</u></b>				
11	Set of steel lockers as per architectural details and design	No	1		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 9 Ironmongery				

Section No. 11				
Bill No. 9				
Ironmongery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		282		
		283		
<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 9				
Ironmongery			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 11                      ADMIN &amp; ADMIN BLOCK EXTENSION                      Bill No. 10                      Metalwork</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><b><u>DOORS, WINDOWS, CURTAIN WALLING, SHOPFRONTS, ETC</u></b></p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Rebated frames suitable for half brick walls with hinges</u></b></p>				
1	Frame for 813 x 2032 x 40mm door	No	4		
	<p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p>				
2	Frame for 813 x 2032 x 40mm door	No	1		
	<p><b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b></p> <p><b><u>Standard school windows</u></b></p>				
3	Top hung standard steel window, finished in Grey oxide primer size 1 511mm x 1 245mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	6		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 10 Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Roller shutter doors</u></b>				
4	Aluminium roller shutter powder coated fixed chain operated for opening, with overhead box 285mm high, with 0,6mm thick slats, 75mm wide side guides and two barrel bolts including extruded aluminium T-bar with rubber seal to suit 2000mm wide opening powder coated finish	No	1		
	<b><u>record room/strongroom doors etc suitable for 230mm walls fixed to brickwork or concrete</u></b>				
5	Chubb or similar approved SANS 949:2005 approved left hand opening category 2 heavy duty strong room door and frame constructed of 20mm steel plate. All to fit wall opening of 1930 x 850mm wide. Mass 450kg. Fitted with one-way moving bolt work with 3 x 250mm round bolts with rebate on hinged side with 2 x 7-lever keylocks, 1 x combination lock, inner release mechanism and floor mounted door stop,	No	1		
6	Cranked Strong room vents	No	3		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 10 Metalwork				

Section No. 11					
Bill No. 10					
Metalwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		285			
		286			
		287			
<b>Carried Forward to Summary of Section No. 11</b>				R	
Section No. 11					
ADMIN & ADMIN BLOCK EXTENSION					
Bill No. 10					
Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b> <b><u>BILL NO. 11</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 11 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
1	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><u>Colour</u></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of 2.5kg pigment per pocket of cement, of uniform appearance and consistent colour throughout</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds on concrete</u></b></p> <p>30mm Thick self levelling screed on floors and landings</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 11 Plastering</p>	m2	223		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><u>Prepare substrate by abrasive blasting or grinding, leaving surface clean, sound, laitance and dust free with a maximum moisture content of 4%. Prime surface with one coat Solvent Based Epoxy Sealer &amp; Penetrating Coat. Apply two coats Beige Ivory 304 (4:1 mixing ratio) epoxy floor with a minimum dry film thickness of 45 microns. Applied in accordance with approved specifications by approved applicators.</u></p> <p>On floors and landings</p>	m2	44		
	<p><b><u>INTERNAL PLASTER</u></b></p>				
3	<p><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></p> <p>On walls</p>	m2	687		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 11 Plastering</p>			R	

Section No. 11				
Bill No. 11				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		289		
		290		
		291		
<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 11				
Plastering			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>Ceramic tiles size 100 x 200mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>1 On walls</p> <p><b><u>FLOOR TILING</u></b></p> <p><b><u>Ceramic tiles size 300 x 300mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>2 On floors and landings</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 11</b></p> <p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 12 Tiling</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>PLUMBING &amp; DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 11                  ADMIN &amp; ADMIN BLOCK EXTENSION                  Bill No. 13                  Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 11 ADMIN &amp; ADMIN BLOCK EXTENSION Bill No. 13 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p> <p><u>General</u></p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 11                  ADMIN &amp; ADMIN BLOCK EXTENSION                  Bill No. 13                  Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<u>As-built drawings</u>				
	<b><u>SANITARYWARE</u></b>				
1	San 001 vitreous china "Hibiscus" close coupled 90° outlet pan rim washdown pan and matching 9 litre front single flush cistern complete with lid and fitment. Top dual flushing option. White. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flushmaster with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flushpipes, elbow and pan connector).	No	4		
2	Sanitaryware Paraplegic vitreous china washdown suite comprising 90° outlet open rim pan flushing valve (elsewhere) including lid and fitments with heavy duty seat. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flush master with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flush pipes, elbow and pan connector).	No	1		
3	San 008 Sanitaryware vitreous china 510mm x 405mm rounded Hibiscus basin with one or two tap hole, including integrated overflow and chain stay hole. Bolted to wall with 2x 10mm bolts. Basin Mixer single lever with pop up waste. 1_ 2" BSP female inlets. SANS 1480\ Paraplegic Toilets to be fitted with two MEDICAL Pillar taps elbow action. 1/2" BSP MI SANS 226 TYPE 2.	No	4		
4	San 013 - WASH HAND BASIN Sanitaryware 510mm x 405mm Hibiscus vitreous china lavatory basin with two tap holes, including integrated overflow, supported on a Classic floor mounted pedestal. White 9 Bolted to wall with 2x 10mm bolts. Basin Mixer single lever with pop up waste. 1_2 " BSP female inlets. SANS 1480	No	1		
5	San 011 - URINAL SANITARYWARE 565 x 275 x 310mm White vitreous china wall mounted back inlet urinal including 38mm chromium plated domical grating and chromium plated back inlet spreader and urinal division fixed with and including fixing screws and hanger brackets.	No	2		
6	SANITARYWARE vitreous china Urinal division, complete with fixing screw and hanger bracket.	No	1		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 13 Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
7	SS004 - STAINLESS STEEL INSET SINK - 1235 x 435 Stainless Steel satin Inset, double bowl, single drainer Sink, Single Sink Mixer with Aerated swivel outlet 1 1/2 " BSP Female outlet. SANS 1480. All included accessories.	No	1		
	<b><u>SOIL DRAINAGE</u></b>				
	<u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u>				
8	50mm Waste pipe	m	23		
9	110mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete	m	6		
10	110 T junction with inspection eye	No	6		
11	Brick sewer manhole	No	3		
12	Gulley	No	3		
13	Stub/vent valve	No	8		
14	Floor drain	No	3		
15	Testing		Item		
	<b><u>WATER SUPPLY</u></b>				
	<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>				
16	22mm Pipes	m	6		
17	22mm Pipes chased into brickwork including brown paper lagging	m	15		
18	Testing water pipe system		Item		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 13 Plumbing & Drainage (Provisional)				

Section No. 11				
Bill No. 13				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
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		297		
		298		
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ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 13				
Plumbing & Drainage (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 11</u></b>				
	<b><u>BILL NO. 14</u></b>				
	<b><u>GLAZING</u></b>				
	<u>Float glass</u>				
	The term "float glass" is used for monolithic annealed glass				
	<u>Laminated glass</u>				
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>				
	<b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m2 All to comply with National building regulations see also glazing preambles for minimum standards.</u></b>				
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	9		
	<b><u>Windows to be glazed to SANS min. standards - 6mm safety glass for all panels lower than 900mm above FFL</u></b>				
2	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	3		
	<b><u>Windows to be glazed to SANS min. standards - Fit obscure glazing in toilets and ablutions</u></b>				
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	3		
	<b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b>				
	<b><u>4mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges, fixed with double sided adhesive tape and silicone</u></b>				
4	450mm x 600mm High quality mirror complete with bevelled edges	No	6		
	<b>Carried Forward to Summary of Section No. 11</b>			R	
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 14 Glazing				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 11</u></b>  <b><u>BILL NO. 15</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11            ADMIN &amp; ADMIN BLOCK EXTENSION            Bill No. 15            Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	687		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	263		
3	On cornice not exceeding 300mm girth	m	275		
	<b><u>ON FASCIA BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to fascia board. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On fascia board	m2	10		
	<b><u>ON NUTEC</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
5	On ceilings	m2	45		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On door frames	m2	4		
7	On window frames	m2	12		
	<b>Carried to Collection</b>				
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 15 Paintwork				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
8	<p><u>Contractors Gloss Enamel (colour to be selected) to new interior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></p> <p>On door frames</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 11                      ADMIN &amp; ADMIN BLOCK EXTENSION                      Bill No. 15                      Paintwork</p>	m2	38		

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
9	On doors	m2	38		
10	On skirtings	m	275		
	<b>Carried to Collection</b>				R
	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION Bill No. 15 Paintwork				

Section No. 11				
Bill No. 15				
Paintwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		Page No		Amount
		301		
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		303		
		304		
<b>Carried Forward to Summary of Section No. 11</b>				
Section No. 11				
ADMIN & ADMIN BLOCK EXTENSION				
Bill No. 15				
Paintwork			R	

Bill No	Section No. 11 ADMIN & ADMIN BLOCK EXTENSION	Page No	Amount
<b><u>SECTION SUMMARY - ADMIN &amp; ADMIN BLOCK EXTENSION</u></b>			
1	Earthworks (Provisional)	261	-----
2	Concrete Formwork & Reinforcement	266	-----
3	Masonry	271	-----
4	Waterproofing	272	-----
5	Roof Coverings, Claddings, etc.	273	-----
6	Carpentry and Joinery	277	-----
7	Ceilings, Partitions and Access Flooring	280	-----
8	Floor Coverings, Wall Linings, etc.	281	-----
9	Ironmongery	284	-----
10	Metalwork	288	-----
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15	Paintwork	305	-----
<b>Carried to Final Summary</b>			R
Section No. 11 ADMIN & ADMIN BLOCK EXTENSION			

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	297		
	<b><u>EXCAVATION, FILLING, ETC</u></b>				
	<b><u>Excavation in earth not exceeding 2m deep</u></b>				
2	Trenches	m3	95		
	<b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b>				
3	Soft rock	m3	5		
4	Hard rock	m3	1		
	<b><u>Extra over all excavations for carting away</u></b>				
5	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	71		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	105		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	In prescribed stock piles on site to trenches and holes	m3	24		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
9	Under surface beds in 150mm layer	m3	45		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 1 Earthworks (Provisional)				

Section No. 12					
Bill No. 1					
Earthworks (Provisional)					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
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<b>Carried Forward to Summary of Section No. 12</b>				R	
Section No. 12					
NEW NUTRITION CENTRE					
Bill No. 1					
Earthworks (Provisional)					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	6		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Bases	m3	1		
3	Strip footings	m3	24		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
4	Surface beds on waterproofing (including thickenings)	m3	33		
5	Padstone	No	22		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>TEST CUBES</u></b>				
6	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	15		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
7	Surface beds, slabs, etc to falls	m2	263		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
8	Surface beds, slabs, etc to falls and currents	m2	34		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	297		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
10	Not exceeding 300mm high to edges of surface beds	m	294		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
11	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	9		
12	3 x 40mm Saw-cut joints in top of concrete	m	66		
	<b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b>				
13	Surface beds not exceeding 300mmm thick as per engineers details	m	103		
	<b>Carried to Collection</b>				
	Section No. 12 NEW NUTRITION CENTRE Bill No. 2 Concrete Formwork & Reinforcement				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>				
14	Y10mm Diameter bars	t	1.00		
15	Y8mm Diameter bars	t	1.00		
	<b><u>High tensile steel dowel bars</u></b>				
16	10mm Diameter dowel bar 400mm long with one end embedded 200mm deep in side of concrete and other end cast in new concrete, including filling with ABE epidermix or similar approved	No	10		
	<b><u>Fabric reinforcement</u></b>				
17	Type 193 fabric reinforcement in concrete surface beds etc	m2	297		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 2 Concrete Formwork & Reinforcement				

Section No. 12				
Bill No. 2				
Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		311		
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<b>Carried Forward to Summary of Section No. 12</b>				
Section No. 12 NEW NUTRITION CENTRE Bill No. 2 Concrete Formwork & Reinforcement				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 3 Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	98		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	49		
3	Half brick walls in beamfilling	m2	12		
4	One brick walls	m2	409		
5	330 x 330mm Brick square brick piers in height 3.34m	No	3		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>BRICKWORK SUNDRIES</u></b>				
6	Forming toothings and bonding new brickwork to existing	m2	36		
	<b><u>Steel bar reinforcement</u></b>				
7	8mm Diameter mild steel bars built in horizontally	t	1.00		
8	8mm Diameter high tensile steel bars built in horizontally	t	1.00		
	<b><u>Air bricks etc</u></b>				
9	229 x 152mm Terracotta vermin proof air brick	No	6		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>				
10	Extra over brickwork for face brickwork for one side of one brick wall	m2	315		
11	Extra over brickwork for face brickwork for one side of one brick wall internally up to 900mm high above FFL	m2	96		
12	Extra over brickwork for facebrickwork for 330mm x 330mm brick column @ 3.34m high	No	3		
13	Extra over face brickwork both sides of one brick wall	m2	39		
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
14	220mm Copings on top of one brick walls	m	15		
15	Facebrick lintels	m	65		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
16	<p><b><u>WINDOW SILLS</u></b></p> <p><b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar ontop of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b></p> <p>110mm Facebrick window sills flat and slightly projecting</p>	m	65		
<b>Carried to Collection</b>					R
<p>Section No. 12                  NEW NUTRITION CENTRE                  Bill No. 3                  Masonry</p>					

Section No. 12				
Bill No. 3				
Masonry				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		Page No		Amount
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		319		
<b>Carried Forward to Summary of Section No. 12</b>				
Section No. 12				
NEW NUTRITION CENTRE				
Bill No. 3				
Masonry			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 12</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	23		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	252		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	212		
	<b>Carried Forward to Summary of Section No. 12</b>				
	Section No. 12 NEW NUTRITION CENTRE Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 12</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	328		
2	Side cladding not exceeding 250mm	m2	15		
3	Gable end side cladding	m2	7		
4	Ridge or Valley flashing	m	12		
5	Ridge Closer	m	12		
	<b><u>Chromadek rood sheeting for walkways to match roofing colour</u></b>				
6	Corrugated Chromadek sheeting @ 3 degree pitch fixed to lip channel	m2	42		
	<b>Carried to Collection</b>				
	Section No. 12 NEW NUTRITION CENTRE Bill No. 5 Roof Coverings, Claddings, etc.				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
7	<p><b><u>ROOF AND WALL INSULATION</u></b></p> <p><b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b></p> <p>135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps</p>	m2	228		
<b>Carried to Collection</b>					R
<p>Section No. 12                  NEW NUTRITION CENTRE                  Bill No. 5                  Roof Coverings, Claddings, etc.</p>					

Section No. 12  Bill No. 5  Roof Coverings, Claddings, etc.  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		Page No 322		Amount
		323		-----
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<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 12</b></p>			R	
Section No. 12 NEW NUTRITION CENTRE Bill No. 5 Roof Coverings, Claddings, etc.				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 6 Carpentry and Joinery</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 14.03 x 28.98m overall on plan x 2.26mm high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	81		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	128		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	733		
5	250 x 20mm Barge boards	m	25		
6	250 x 20mm Fascias	m	58		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
7	813 x 2032 x 40mm Solid core flush masonite panel door	No	10		
8	Double leaf small pane steel French doors (Code: DDA), overall size 1511 x 2134mm high	No	1		
9	1280 x 1825mm Galvanised steel double room door	No	1		
10	900 x 2032 x 40mm Solid core flush masonite panel door	No	2		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>WINDOWS</u></b>				
	<b><u>Standard hardboard</u></b>				
11	10mm Duct covers in 100mm widths, fixed at 100mm centres along edges with chromium plated dome headed screws in cup washers	m2	27		
	<b><u>JOINERY SUNDRIES</u></b>				
	<b><u>Wrought Meranti or similar approved</u></b>				
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>Wrought Meranti or similar</u></b>				
12	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	1		
	<b><u>White boards</u></b>				
13	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, fixed to plastered walls	No	2		
	<b><u>Fire extinguisher boards</u></b>				
14	20mm Backboards for 4,5kg fire extinguishers plugged to wall	No	2		
	<b><u>CUPBOARDS AND COUNTER TOP JOINERY TO KITCHENS, BEDROOMS, TOPS ETC</u></b>				
	<b><u>Cupboards and shelving etc.</u></b>				
	<b><u>Refer to Sediko - Sheet - DBSA-JBT-S1-ARCH-DWG104 DNC Plans &amp; Sections</u></b>				
15	Shelving 2070 x 500mm deep and 1700 x 600mm deep made and fixed to walls etc. complete as per architectural details	No	1		
16	L shaped shelving 600mm seep 3.6m long made and fixed to walls etc. complete as per architectural details	No	1		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
17	L shaped shelving 600mm seep 3.6m long made and fixed to walls etc. complete as per architectural details	No	1		
<b><u>Counter Tops</u></b>					
18	Solid serving counter fixed to wall with brackets or similar including holes	No	1		
19	kitchen counter unit as per design detail drawing, including granite counter top cupboards, shelves, cut outs etc. complete n.e 8.2m2 surface counter space	No	1		
<b>Carried to Collection</b>					R
Section No. 12 NEW NUTRITION CENTRE Bill No. 6 Carpentry and Joinery					

Section No. 12				
Bill No. 6				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		325		
		326		
		327		
		328		
<b>Carried Forward to Summary of Section No. 12</b>				
Section No. 12 NEW NUTRITION CENTRE Bill No. 6 Carpentry and Joinery				R

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 12</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brandering at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 7 Ceilings, Partitions and Access Flooring</p>	m2	204		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brandering at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber brandering shall be suitably fixed to the tie beam/joist.</u></p>				
2	<p>Ceilings nailed-up not exceeding 1m below roof trusses</p> <p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p>	m2	45		
3	<p>Cornice</p>	m	137		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 7 Ceilings, Partitions and Access Flooring</p>			R	

Section No. 12  Bill No. 7  Ceilings, Partitions and Access Flooring  <b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b> 330		<b>Amount</b>	
		331		-----	
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<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 12</b></p>				R	
Section No. 12 NEW NUTRITION CENTRE Bill No. 7 Ceilings, Partitions and Access Flooring					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>1 On new screeded floors</p> <p><b><u>Fully flexible vinyl floor skirting 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p> <p>2 100mm High skirting</p>	m2	127		
	<p><b>Carried Forward to Summary of Section No. 12</b></p>			R	
	<p>Section No. 12 NEW NUTRITION CENTRE Bill No. 8 Floor Coverings, Wall Linings, etc.</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p><b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	3		
2	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	5		
3	2 x Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	2		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 9 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
4	4 x UNION two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
5	Stainless steel indicator bolts with Stainless Steel finish. 2 x two ball bearing butt hinge with Stainless Steel finish. Stainless Steel 152 x 76mm push plate, size 152 x 76mm. Stainless Steel floor mounted door stop, size 24 x 45mm	No	2		
	<b><u>Bathroom accessories</u></b>				
6	San 010 - ROBE HOOK - chrome plated robe hook size 89 x 57mm wide, plugged and screwed to wall	No	2		
7	San 009 - WASTE BIN Waste container - 1,25mm thick 18/10 satin stainless steel perforated waste containers, size 380x410x205mm deep, with 180 degree radius front and perforated facia pattern, waste bin capacity of 23 litres, with lock, plugged and screwed to the wall with stainless steel screws	No	4		
8	San 006 - TOILET ROLL HOLDER Standard stainless steel wall mounted lockable toilet roll holder	No	2		
9	San 007 - SOAP DISPENSER Standard stainless steel wall mounted soap dispenser	No	2		
	<b><u>PUSH PLATES AND KICK PLATES</u></b>				
	<b><u>2mm Thick anodised aluminium plates countersunk screwed along edges at not exceeding 200mm centres</u></b>				
10	813 x 250mm Kick plate	No	8		
	<b><u>DOOR CLOSERS</u></b>				
	<b><u>Manufactured by Dorma or equally approved</u></b>				
11	Door closer	No	3		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 9 Ironmongery				

Section No. 12  Bill No. 9  Ironmongery  <b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b> 334		<b>Amount</b>	
		335		-----	
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<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 12</b></p>				R	
Section No. 12 NEW NUTRITION CENTRE Bill No. 9 Ironmongery					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 10 Metalwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p>STEEL STAIRS</p> <p><b><u>DOORS, WINDOWS, CURTAIN WALLING, SHOPFRONTS, ETC</u></b></p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Rebated frames suitable for half brick walls with hinges</u></b></p> <p>1 Frame for 813 x 2032 x 40mm door No 3</p> <p>2 Frame for 900 x 2032 x 40mm door No 2</p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p> <p>3 Frame for 813 x 2032 x 40mm door and fixed fanlight 235mm high No 5</p> <p>4 Frame for 1568 x 2032mm double door No 1</p> <p>5 Frame for 280 x 1825mm double door with fixing lugs and 2 steel butt hinges, suitable for 270mm facebrick walls No 1</p> <p><b><u>Preparation of frames for fixing of ironmongery</u></b></p> <p>6 Arm of door closer No 3</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 12 NEW NUTRITION CENTRE Bill No. 10 Metalwork</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b>				
	<b><u>Standard school windows</u></b>				
7	Top hung standard steel window, finished in Grey oxide primer, size 533mm x 654mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	4		
8	Top hung standard steel window, finished in Grey oxide primer, size 1022mm x 1245mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	10		
9	Top hung standard steel window, finished in Grey oxide primer, size 889mm x 427mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	1		
10	Top hung standard steel window, finished in Grey oxide primer, size 889mm x 854mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	13		
	<b><u>Roller shutter doors</u></b>				
11	Aluminium roller shutter powder coated fixed chain operated for opening, with overhead box 285mm high, with 0,6mm thick slats, 75mm wide side guides and two barrel bolts including extruded aluminium T-bar with rubber seal to suit 2000mm wide opening powder coated finish	No	1		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 10 Metalwork				

Section No. 12					
Bill No. 10					
Metalwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		Page No		Amount	
		337			
		338		-----	
		339		-----	
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<b>Carried Forward to Summary of Section No. 12</b>				R	
Section No. 12					
NEW NUTRITION CENTRE					
Bill No. 10					
Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b> <b><u>BILL NO. 11</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 11 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self levelling Screeds on concrete</u></b></p>				
1	30mm Thick screed on floors and landings	m2	127		
2	On floors and landings	m2	55		
	<b>Carried to Collection</b>			R	
	Section No. 12 NEW NUTRITION CENTRE Bill No. 11 Plastering				

Item No	Description	Unit	Quantity	Rate	Amount
3	<p><u>Ensure the surface to be treated is clean and free from dirt, stains, oil, release agents, wax coatings etc. Clean with appropriate Tile and Floor Care product before application. Using a suitable applicator, apply three coats of stain with 30 minute intervals between coats. Allow 48 hours for the stain to achieve its full colour development. Overcoat with Top Seal.</u></p> <p>On floors and landings</p>	m2	23		
4	<p><b><u>INTERNAL PLASTER</u></b></p> <p><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></p> <p>On walls</p>	m2	342		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 11 Plastering</p>			R	

Section No. 12				
Bill No. 11				
Plastering				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		341		
		342		
		343		
<b>Carried Forward to Summary of Section No. 12</b>				
Section No. 12 NEW NUTRITION CENTRE Bill No. 11 Plastering				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>Ceramic tiles size 100 x 200mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>1 On walls</p> <p><b><u>FLOOR TILING</u></b></p> <p><b><u>Ceramic tiles size 300 x 300mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>2 On floors and landings</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 12</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 12 Tiling</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p> <p><u>General</u></p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 12                      NEW NUTRITION CENTRE                      Bill No. 13                      Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<u>As-built drawings</u>				
	<b><u>SANITARYWARE</u></b>				
1	San 001 vitreous china "Hibiscus" close coupled 90° outlet pan rim washdown pan and matching 9 litre front single flush cistern complete with lid and fitment. Top dual flushing option. White. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flushmaster with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flushpipes, elbow and pan connector).	No	2		
2	Sanitaryware Paraplegic vitreous china washdown suite comprising 90° outlet open rim pan flushing valve (elsewhere) including lid and fitments with heavy duty seat. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flush master with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flush pipes, elbow and pan connector).	No	1		
3	San 011 - URINAL SANITARYWARE 565 x 275 x 310mm White vitreous china wall mounted back inlet urinal including 38mm chromium plated domical grating and chromium plated back inlet spreader and urinal division fixed with and including fixing screws and hanger brackets.	No	1		
4	SANITARYWARE vitreous china Urinal division, complete with fixing screw and hanger bracket.	No	1		
5	SS008 - 0,9mm Grade 304 18/10 stainless steel WB004 wash hand basin, size 2024 x 430 x 140mm deep with four pressed bowls size 406 x 300 x 140mm deep, 25mm splashback and 40mm waste outlet, 25mm stainless steel square gallows brackets with front legs bolted to wall with 4 x 6mm anchor bolts. Stella Bright Cobra Watertech, 15mm pillar tap with flanged backnut with waste plug	No	1		
	<b>Carried to Collection</b>				
	Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing & Drainage (Provisional)				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
6	SS007 - STAINLESS STEEL inset Wash trough 600x500x257mm. Unit to be manufactured from Grade 304 (18/10) Stainless Steel, 0,9mm gauge. Unit to include a pressed bowl 525x425x257mm deep (43 litres) with a 40mm waste outlet. Unit to be fitted into the worktop, cut out size 585x485mm (worktop elsewhere measured).Stainless Steel Single Sink Mixer with Aerated swivel outlet 1 1/2 " BSP Female outlet. SANS 1480. All included accessories.	No	3		
7	SS006 - STAINLESS STEAL FLOOR DRAIN with Side Inlets 1-4. Unique Full Flow Floor Trap with the following features: Manufactured from Stainless Steel 304 to ensure acid corrosion and stain resistance. A double water seal to ensure odour-free operation. A large sludge box which retains all the coarse slurry . Top Flange Type: Round (For Epoxy Floors) or Square (For Tiled Floors) Top Cover Plate Type: Circular aperture / Slots / Holes - as requested. Extension for side inlets: 1, 2, 3 or 4 inlets	No	2		
8	SS009 - STAINLESS STEAL FLOOR DRAIN for refuse area with the following features. Manufactured from Stainless Steel 304 to ensure acid corrosion and stain resistance. A double water seal to ensure odour-free operation.Smooth surface for easy cleaning, minimum dirt collection & high flow rates. A large sludge box which retains all the coarse slurry. Top Flange Type: Square (For Tiled Floors). Top Cover Plate Type: Holes - as requested	No	2		
9	SS005 - STAINLESS STEEL GREASE TRAP Rofu Engineering grade stainless steel grease trap, with two large strainer baskets with draining slots size 700 x 400 x 400mm with 110mm horizontal inlet and 110mm waste outlet, connected to waste pipe.	No	1		
10	San 001 vitreous china "Hibiscus" close coupled 90° outlet pan rim washdown pan and matching 9 litre front single flush cistern complete with lid and fitment. Top dual flushing option. White. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flushmaster with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flushpipes, elbow and pan connector).	No	2		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
11	SS001 - STAINLESS STEEL DOUBLE BOWL SINK Cold pressed bowl, AISI 304CR NI grade stainless steel with 40mm waste outlet hole. 150mm High splash back to rear. Heavy duty backing sheet with bitumastic sound deadening. stainless steel legs with adjustable foot pieces. single Sink Mixer with Aerated swivel outlet 1 1/2 " BSP Female outlet. SANS 1480. All included accessories.	No	1		
	<b><u>SOIL DRAINAGE</u></b>				
	<u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u>				
12	50mm Waste pipe	m	14		
13	110mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete	m	14		
14	T junction with inspection eye	No	2		
15	Brick sewer manhole	No	1		
16	Gulley	No	1		
17	Stub/vent valve	No	1		
	<b><u>WATER SUPPLY</u></b>				
	<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>				
18	22mm Pipes	m	6		
19	22mm Pipes chased into brickwork including brown paper lagging	m	15		
20	Testing water pipe system		Item		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing & Drainage (Provisional)				

Section No. 12				
Bill No. 13				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		346		
		347		
		348		
		349		
		350		
		351		
<b>Carried Forward to Summary of Section No. 12</b>				
Section No. 12 NEW NUTRITION CENTRE Bill No. 13 Plumbing & Drainage (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b></p> <p><b><u>BILL NO. 14</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m2. All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>				
1	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E safety glass in panes smaller than 0.5m2</u></b> <b><u>All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>	m2	20		
2	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m2</u></b> <b><u>Fit with obscure glazing in toilets and ablutions. All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>	m2	4		
3	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	2		
	<b>Carried to Collection</b>				R
	<p>Section No. 12 NEW NUTRITION CENTRE Bill No. 14 Glazing</p>				

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b></p> <p><b><u>4mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges, fixed with double sided adhesive tape and silicone</u></b></p> <p>450mm x 600mm High quality mirror complete with bevelled edges</p>	No	4		
<b>Carried to Collection</b>					R
Section No. 12 NEW NUTRITION CENTRE Bill No. 14 Glazing					

Section No. 12					
Bill No. 14					
Glazing					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		353			
		354			
<b>Carried Forward to Summary of Section No. 12</b>					
Section No. 12 NEW NUTRITION CENTRE Bill No. 14 Glazing				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 12</u></b> <b><u>BILL NO. 15</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p><b><u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u></b></p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 12 NEW NUTRITION CENTRE Bill No. 15 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	342		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	204		
3	On cornice not exceeding 300mm girth	m	137		
	<b><u>ON NUTEC</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new Nutec ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
4	On ceilings	m2	45		
	<b><u>ON METAL</u></b>				
5	On door frames	m2	5		
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On doors	m2	54		
	<b>Carried to Collection</b>				R
	Section No. 12 NEW NUTRITION CENTRE Bill No. 15 Paintwork				

Section No. 12					
Bill No. 15					
Paintwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		356			
		357			
<b>Carried Forward to Summary of Section No. 12</b>					
Section No. 12					
NEW NUTRITION CENTRE					
Bill No. 15					
Paintwork					

R

Bill No	Section No. 12 NEW NUTRITION CENTRE	Page No	Amount
<b><u>SECTION SUMMARY - NEW NUTRITION CENTRE</u></b>			
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2	Concrete Formwork & Reinforcement	315	
3	Masonry	320	
4	Waterproofing	321	
5	Roof Coverings, Claddings, etc.	324	
6	Carpentry and Joinery	329	
7	Ceilings, Partitions and Access Flooring	332	
8	Floor Coverings, Wall Linings, etc.	333	
9	Ironmongery	336	
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11	Plastering	344	
12	Tiling	345	
13	Plumbing & Drainage (Provisional)	352	
14	Glazing	355	
15	Paintwork	358	
<b>Carried to Final Summary</b>			R
Section No. 12 NEW NUTRITION CENTRE			

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches and holes</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 1 Earthworks (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	261		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	In prescribed stock piles on site to trenches and holes	m3	25		
	<b><u>Filling of natural gravel material G7 supplied by the contractor, compacted to 95% Mod AASHTO density</u></b>				
9	Under floors, steps, pavings, etc	m3	40		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	5		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 1 Earthworks (Provisional)				
				R	

Section No. 13				
Bill No. 1				
Earthworks (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		360		
		361		
		362		
<b>Carried Forward to Summary of Section No. 13</b>				
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 1 Earthworks (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	1		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Bases	m3	3		
3	Strip footings	m3	20		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
4	Surface beds on waterproofing (including thickenings)	m3	28		
5	Ring Beams or Isolated beams	m3	1		
6	Stairs including landings, beams and inverted beams	m3	1		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>TEST CUBES</u></b>				
7	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	5		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
8	Surface beds, slabs, etc to falls	m2	70		
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
9	Surface beds, slabs, etc to falls and currents	m2	204		
	<b><u>20 MPa non-shrink grout</u></b>				
10	Bedding approximately 100mm thick under 50 x 50mm base plate	No	14		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	272		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
12	Not exceeding 300mm high to edges of surface beds	m	142		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
13	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	9		
14	3 x 40mm Saw-cut joints in top of concrete	m	51		
	<b>Carried to Collection</b>				
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 2 Concrete Formwork & Reinforcement				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
15	<p><b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b></p> <p>Surface beds not exceeding 300mmm thick as per engineers details</p>	m	127		
	<p><b><u>REINFORCEMENT</u></b></p>				
	<p><b><u>High tensile steel reinforcement to structural concrete work</u></b></p>				
16	Y10mm Diameter bars	t	1.00		
17	Y8mm Diameter bars	t	1.00		
	<p><b><u>Fabric reinforcement</u></b></p>				
18	Type 193 fabric reinforcement in concrete surface beds etc	m2	260		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 2 Concrete Formwork &amp; Reinforcement</p>			R	

Section No. 13					
Bill No. 2					
Concrete Formwork & Reinforcement					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		364			
		365		-----	
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<b>Carried Forward to Summary of Section No. 13</b>					
Section No. 13					
NEW GRADE R CLASSROOMS					
Bill No. 2					
Concrete Formwork & Reinforcement					

R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b>  <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13  NEW GRADE R CLASSROOMS  Bill No. 3  Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	162		
2	330 x 330mm Brick square brick piers in foundations at 680mm high	No	14		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
3	Half brick walls	m2	123		
4	Half brick walls in beamfilling	m2	9		
5	One brick walls	m2	272		
6	330 x 330mm Brick square brick piers in height 3.34m	No	14		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Steel bar reinforcement</u></b>				
7	8mm Diameter mild steel bars built in horizontally	t	1.00		
8	8mm Diameter high tensile steel bars built in horizontally	t	1.00		
	<b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>				
9	75 x 110mm Lintels in lengths not exceeding 3m	m	15		
10	75 x 220mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	25		
11	220 x 110mm Lintels in lengths exceeding 4,5m and not exceeding 6m	m	40		
	<b><u>Turning pieces to lintels etc</u></b>				
12	220mm Wide turning pieces	m	23		
	<b><u>Air bricks etc</u></b>				
13	229 x 152mm Terracotta vermin proof air brick	No	4		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>				
14	Extra over brickwork for face brickwork for one side of one brick wall	m2	221		
15	Extra over brickwork for face brickwork for one side of one brick wall internally up to 900mm high above FFL	m2	74		
16	Extra over brickwork for facebrickwork for 330mm x 330mm brick column @ 3.34m high	No	9		
17	Extra over face brickwork both sides of one brick wall	m2	20		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar on top of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
18	220mm Copings on top of one brick walls	m	23		
19	Facebrick lintels	m	54		
	<b><u>WINDOW SILLS</u></b>				
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Saphire Imperial FBS Clay" face bricks laid into mortar on top of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
20	110mm Facebrick window sills flat and slightly projecting	m	54		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 3 Masonry				

Section No. 13					
Bill No. 3					
Masonry					
<b><u>COLLECTION</u></b>					
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<b>Carried Forward to Summary of Section No. 13</b>				R	
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 3 Masonry					

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 13</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	18		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	261		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	163		
	<b>Carried Forward to Summary of Section No. 13</b>				
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 4 Waterproofing				R

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 13</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	288		
2	Side cladding not exceeding 250mm	m2	12		
3	Ridge or Valley flashing	m	37		
4	Ridge Closer	m	37		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
5	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	204		
	<b>Carried Forward to Summary of Section No. 13</b>				
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 5 Roof Coverings, Claddings, etc.				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 6 Carpentry and Joinery</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 11.72 x 26.30m overall on plan x 1.75mm high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	70		
	<b><u>SKIRTINGS</u></b>				
	<b><u>Timber Skirting, size 18 x 100mm plugged and screwed to wall surface.</u></b>				
3	18mm x 100mm High skirtings	m	12		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	1 331		
5	250 x 20mm Fascias	m	46		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>DOORS ETC</u></b>				
6	813 x 2032 x 40mm Solid core flush masonite panel door	No	10		
7	762 x 2032 x 40mm Solid core flush masonite panel door	No	4		
8	1025 x 2032 x 40mm Solid core flush masonite panel door	No	4		
9	900 x 2032 x 40mm Solid core flush masonite panel door	No	2		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 6 Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u></b>				
	<b><u>Wrought Meranti or similar</u></b>				
10	Standard 20mm Pinning or notice board 1500 x 1500mm high glued to backboard fixed with timber 38 x 38mm Grounds, glued too plastered walls	No	2		
	<b><u>White boards</u></b>				
11	Classroom white boards not exceeding 8m2 with 38 x 38mm Grounds, fixed to plastered walls	No	2		
	<b><u>CUPBOARDS AND COUNTER TOP JOINERY TO KITCHENS, BEDROOMS, TOPS ETC</u></b>				
	<b><u>Cupboards and shelving etc.</u></b> <b><u>Refer to Sediko - Sheet - DBSA-JBT-S1-ARCH-DWG107 Grade R Plans</u></b>				
12	Bult in cupboard as per architectural details	No	2		
13	3-46-00 Stat cupboard : 4 adjustable shelves & lock doors Drawer as per architects details complete	No	2		
14	Specialised shelving of various sizes as per architectural details	No	4		
	<b><u>Counter Tops</u></b>				
15	Counter Top to underside of window (W19) as per architecture details	No	2		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 6 Carpentry and Joinery				

Section No. 13				
Bill No. 6				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		376		
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<b>Carried Forward to Summary of Section No. 13</b>				
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NEW GRADE R CLASSROOMS				
Bill No. 6				
Carpentry and Joinery				

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 13</u></b>  <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine brandering at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation</u></b></p> <p>Ceilings nailed-up not exceeding 1m below roof trusses</p>	m2	184		
	<b>Carried to Collection</b>			R	
	<p>Section No. 13  NEW GRADE R CLASSROOMS  Bill No. 7  Ceilings, Partitions and Access Flooring</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Installation of RhinoBoard 6.4mm including 38 x 38mm SA Pine branderling at 400mm centres in one direction, ceiling screws at 150mm centre to centre to timber at max 400mm centre to centre to tie beam. Including concealed grid with staggered joints, M strips and spot screw heards. Plus Isover 115mm thick Aerolite thermal ceiling insulation. Timber branderling shall be suitably fixed to the tie beam/joist.</u></p>				
2	<p>External nailed-up ceiling</p> <p><u>Cornice, perimeter trims, etc to ceiling</u></p> <p><u>Gypsum cornice, 75 x 75mm high</u></p>	m2	55		
3	<p>Cornice</p>	m	177		
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 7 Ceilings, Partitions and Access Flooring</p>			R	

<p>Section No. 13</p> <p>Bill No. 7</p> <p>Ceilings, Partitions and Access Flooring</p> <p><b><u>COLLECTION</u></b></p>				
<p>Total Brought Forward from Page No.</p>		<p><b>Page No</b></p>		<p><b>Amount</b></p>
		<p>380</p>		<p>-----</p>
		<p>381</p>		<p>-----</p>
<p><b>Carried Forward to Summary of Section No. 13</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 7 Ceilings, Partitions and Access Flooring</p>			<p>R</p>	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>FLOOR COVERINGS, WALL LININGS, ETC.</u></b></p> <p><u>Fixing</u></p> <p>Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc</p> <p><b><u>FLOOR COVERINGS</u></b></p> <p><b><u>Fully flexible vinyl floor tiles, size 300 x 300 x 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
1	On new screeded floors	m2	184		
	<p><b><u>Fully flexible vinyl floor skirting 2.5mm thick, manufactured in accordance with SANS 786:2000, laid in adhesive spread with a trowel using Leveller when required and rolled with 68kg three section metal roller on completion.</u></b></p>				
2	100mm High skirting	m	150		
	<p><b>Carried Forward to Summary of Section No. 13</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 8 Floor Coverings, Wall Linings, etc.</p>				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b>  <b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	10		
2	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	4		
3	Stainless steel indicator bolts with Stainless Steel finish. 2 x two ball bearing butt hinge with Stainless Steel finish. Stainless Steel 152 x 76mm push plate, size 152 x 76mm. Stainless Steel floor mounted door stop, size 24 x 45mm	No	2		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 9 Ironmongery				

Item No	Description	Unit	Quantity	Rate	Amount
4	Stainless steel indicator bolts with Stainless Steel finish. 2 x two ball bearing butt hinge with Stainless Steel finish. Stainless Steel 152 x 76mm push plate, size 152 x 76mm. Stainless Steel floor mounted door stop, size 24 x 45mm	No	2		
5	Stainless steel indicator bolts with Stainless Steel finish. Stainless Steel 152 x 76mm push plate, size 152 x 76mm .Wall mounted door stop	No	2		
<b><u>PUSH PLATES AND KICK PLATES</u></b>					
6	2mm Thick anodised aluminium plates countersunk screwed along edges at not exceeding 200mm centres 813 x 250mm Kick plate	No	8		
<b><u>DOOR CLOSERS</u></b>					
7	Manufactured by Dorma or equally approved Door closer	No	4		
<b><u>BATHROOM FITTINGS</u></b>					
8	Manufactured by Franke or equally approved San 002 - PARAPLEGIC LEFT HAND DOG RAIL Standard 300 x 300 X300 x 80mm Projecting dog leg side rail as by Stainless Steel Design	No	1		
9	San 003 - PARAPLEGIC RIGHT HAND DOG RAIL Standard 300 x 300 X300 x 80mm Projecting dog leg side rail as by Stainless Steel Design	No	2		
10	San 009 - WASTE BIN Waste container - 1,25mm thick 18/10 satin stainless steel perforated waste containers, size 380x410x205mm deep, with 180 degree radius front and perforated fascia pattern, waste bin capacity of 23 litres, with lock, plugged and screwed to the wall with stainless steel screws	No	6		
11	San 004 - PARAPLEGIC BACK GRAB RAIL Standard 800 long x 150mm projecting straight disabled rail as by stainless steel design.	No	3		
12	San 006 - TOILET ROLL HOLDER Standard stainless steel wall mounted lockable toilet roll holder	No	6		
<b>Carried to Collection</b>					R
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 9 Ironmongery					

Item No	Description	Unit	Quantity	Rate	Amount
13	San 007 - SOAP DISPENSER Standard stainless steel wall mounted soap dispenser	No	10		
14	San 010 - ROBE HOOK - chrome plated robe hook size 89 x 57mm wide, plugged and screwed to wall	No	12		
<b>Carried to Collection</b>					R
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 9 Ironmongery					

Section No. 13				
Bill No. 9				
Ironmongery				
<b><u>COLLECTION</u></b>				
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<b>Carried Forward to Summary of Section No. 13</b>				
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 9 Ironmongery			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 10 Metalwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Rebated frames suitable for half brick walls with hinges</u></b></p>				
1	Frame for 813 x 2032 x 40mm door	No	4		
2	Frame for 762 x 2032 x 40mm door	No	4		
	<p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p>				
3	Frame for 813 x 2032 x 40mm door	No	6		
4	Frame for 1000 x 2032 x 40mm door	No	2		
5	Frame for 900 x 2032 x 40mm door	No	4		
6	Preparation of frames for fixing of ironmongery Arm of door closer	No	4		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 10 Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
<b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b>					
<b><u>Standard school windows</u></b>					
7	Top & side hung standard steel window, finished in Grey oxide primer, size 1 511mm x 1 245mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	12		
8	Top hung standard steel window, finished in Grey oxide primer, size 889mm x 854mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	8		
9	Top hung standard steel window, finished in Grey oxide primer (Code: C1), size 533mm x 949mm high, fitted with B1 burglar bars. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant	No	4		
<b>Carried to Collection</b>					R
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 10 Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
10	<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p> <p><b><u>Aluminium windows</u></b></p> <p>Customer-made aluminium vertical pivot window with dimensions and configuration as indicated. Window to comply strictly to SABS as well as the AAAMSA standards concerning sections, size and opening section. Joints between window frame and wall opening to be sealed water tight with an approved sealant Standard aluminium frame in configuration as shown with or without opening sections as shown, complete with heavy-duty hinges, latches and restrictors (max. 100mm). Waterproof frame surround and joints with an approved soft seal. Polyester powder coated. All to AAAMSA standards and Architects approval. Windows to be glazed to SANS min. standards - 6.4mm single glass in panes smaller than and 6mm safety glass for all panels lower than 900mm above FFL (Fit obscure glazing in toilets and ablutions). All to comply with National building regulations see also glazing preambles for minimum standards.</p>	No	2		
	<b>Carried to Collection</b>			R	
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 10 Metalwork				

Section No. 13				
Bill No. 10				
Metalwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		388		
		389		
		390		
		391		
<b>Carried Forward to Summary of Section No. 13</b>				
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 10 Metalwork			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b> <b><u>BILL NO. 11</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 11 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
1	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><u>Colour</u></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of 2.5kg pigment per pocket of cement, of uniform appearance and consistent colour throughout</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self Levelling Screeds on concrete</u></b></p> <p>30mm Thick self levelling screed on floors and landings</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 11 Plastering</p>	m2	234		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
2	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p> <p>On walls</p>	m2	420		
3	<p><b><u>EXTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p> <p>On walls</p>	m2	33		
<b>Carried to Collection</b>					R
<p>Section No. 13                  NEW GRADE R CLASSROOMS                  Bill No. 11                  Plastering</p>					

Section No. 13 Bill No. 11 Plastering <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 393		<b>Amount</b>
		394		-----
		395		-----
<p style="text-align: center;"><b>Carried Forward to Summary of Section No. 13</b></p> Section No. 13 NEW GRADE R CLASSROOMS Bill No. 11 Plastering			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>Ceramic tiles size 100 x 200mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>1 On walls</p> <p><b><u>FLOOR TILING</u></b></p> <p><b><u>Ceramic tiles size 300 x 300mm, fixed to internal wall plaster backing with tile adhesive mixed with Bond in lieu of water with joints continuous in both directions and grouted</u></b></p> <p>2 On floors and landings</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 13</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 12 Tiling</p>				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>PLUMBING &amp; DRAINAGE</u></b></p> <p><b><u>BILL NO. 13 PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Stormwater channels</u></p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Septic tanks</u></p> <p>Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 13                  NEW GRADE R CLASSROOMS                  Bill No. 13                  Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p>				
	<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 13 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p> <p><u>General</u></p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 13                      NEW GRADE R CLASSROOMS                      Bill No. 13                      Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<u>As-built drawings</u>				
	<b><u>SANITARYWARE</u></b>				
1	San 005 - PARAPLEGIC WC Sanitaryware Paraplegic vitreous china washdown suite comprising 90Ø outlet open rim pan flushing valve including lid and fitments with heavy duty seat. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flush master with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flush pipes, elbow and pan connector).	No	2		
2	San 008 Sanitaryware vitreous china 510mm x 405mm rounded Hibiscus basin with one or two tap hole, including integrated overflow and chain stay hole. Bolted to wall with 2x 10mm bolts. Basin Mixer single lever with pop up waste. 1_ 2" BSP female inlets. SANS 1480\ Paraplegic Toilets to be fitted with two MEDICAL Pillar taps elbow action. 1/2" BSP MI SANS 226 TYPE 2.	No	10		
3	San 019 - Junior WC white vitreous China Junior School Pan, 8.3kg, pan set White 1,95kg Vitreous China seat. Plumbing: 20mm Brushed chrome Econoflush front access junior concealed toilet flushmaster with integral shut-off valve, box stainless steel faceplate and chrome plated pushbutton assembly (includes flushpipes, elbow and pan connector).	No	4		
4	SS003 - STAINLESS STEEL INSET SINK (900x500). Grade 304 18/10 polished stainless steel left hand inset sink (code: 820000), size 900 x 500mm wide with one 410 x 343 x 187 deep bowl, fitted onto cupboard or wall including 90mm waste fitting and PVC trap. Single Sink Mixer with Aerated swivel outlet 1 1/2 " BSP Female outlet. SANS 1480. All included accessories.	No	2		
	<b><u>SOIL DRAINAGE</u></b>				
	<u>All pipework includes fittings, joints etc. calculated by specialist pricing BOQ</u>				
5	50mm Waste pipe	m	8		
6	110mm pvc pipe laid to min falls 1:60. Pipes beneath slab to be encased in concrete	m	6		
	<b>Carried to Collection</b>				R
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 13 Plumbing & Drainage (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
7	T junction with inspection eye	No	6		
8	Brick sewer manhole	No	2		
9	Gulley	No	2		
10	Stub/vent valve	No	3		
<b><u>WATER SUPPLY</u></b>					
<b><u>Class 1 copper pipes are recommended for high quality installations</u></b>					
11	22mm Pipes	m	6		
12	22mm Pipes chased into brickwork including brown paper lagging	m	13		
13	Testing water pipe system		Item		
<b>Carried to Collection</b>					R
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 13 Plumbing & Drainage (Provisional)					

Section No. 13				
Bill No. 13				
Plumbing & Drainage (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		398		
		399		
		400		
		401		
		402		
<b>Carried Forward to Summary of Section No. 13</b>				
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 13 Plumbing & Drainage (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b></p> <p><b><u>BILL NO. 14</u></b></p> <p><b><u>GLAZING</u></b></p> <p><u>Float glass</u></p> <p>The term "float glass" is used for monolithic annealed glass</p> <p><u>Laminated glass</u></p> <p><b><u>GLAZING TO STEEL WITH PUTTY</u></b></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m<sup>2</sup></u></b>  <b><u>All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>				
1	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E glass in panes smaller than 0.5m<sup>2</sup> fit with obscure glass for ablution/toilet areas</u></b>  <b><u>All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>	m2	19		
2	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p> <p><b><u>Windows to be glazed to SANS min. standards - 6.4mm Low-E Safety glass in panes smaller than 0.5m<sup>2</sup></u></b>  <b><u>All to comply with National building regulations see also glazing preambles for minimum standards.</u></b></p>	m2	4		
3	<p>Panes exceeding 0,1m<sup>2</sup> and not exceeding 0,5m<sup>2</sup></p>	m2	5		
	<b>Carried to Collection</b>				
	<p>Section No. 13                      NEW GRADE R CLASSROOMS                      Bill No. 14                      Glazing</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
4	<p><b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b></p> <p><b><u>4mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges, fixed with double sided adhesive tape and silicone</u></b></p> <p>450mm x 600mm High quality mirror complete with bevelled edges</p>	No	10		
<b>Carried to Collection</b>					R
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 14 Glazing					

Section No. 13				
Bill No. 14				
Glazing				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		404		
		405		
<b>Carried Forward to Summary of Section No. 13</b>				
Section No. 13				
NEW GRADE R CLASSROOMS				
Bill No. 14				
Glazing			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 13</u></b> <b><u>BILL NO. 15</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p><b><u>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</u></b></p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 13 NEW GRADE R CLASSROOMS Bill No. 15 Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	420		
2	On external walls	m2	33		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
3	On ceilings	m2	184		
4	On cornice not exceeding 300mm girth	m	177		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
5	On door frames	m2	5		
	<b><u>ON WOOD</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
6	On doors	m2	45		
	<b><u>Painted with Carbolineum paint as per architects specification</u></b>				
7	On exposed trusses	m2	20		
	<b>Carried to Collection</b>				
	Section No. 13 NEW GRADE R CLASSROOMS Bill No. 15 Paintwork				
				R	

Section No. 13 Bill No. 15 Paintwork <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 407		<b>Amount</b>
		408		-----
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<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 13</b></p>			R	
Section No. 13 NEW GRADE R CLASSROOMS Bill No. 15 Paintwork				

Bill No	Section No. 13 NEW GRADE R CLASSROOMS <b><u>SECTION SUMMARY - NEW GRADE R CLASSROOMS</u></b>	Page No	Amount
1	Earthworks (Provisional)	363	
2	Concrete Formwork & Reinforcement	368	
3	Masonry	373	
4	Waterproofing	374	
5	Roof Coverings, Claddings, etc.	375	
6	Carpentry and Joinery	379	
7	Ceilings, Partitions and Access Flooring	382	
8	Floor Coverings, Wall Linings, etc.	383	
9	Ironmongery	387	
10	Metalwork	392	
11	Plastering	396	
12	Tiling	397	
13	Plumbing & Drainage (Provisional)	403	
14	Glazing	406	
15	Paintwork	409	
	<b>Carried to Final Summary</b>		
	Section No. 13 NEW GRADE R CLASSROOMS		R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 1 Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note</p> <p>When no information regarding density and other tests is available the following preamble in respect of testing may be inserted</p> <p><u>Testing</u></p> <p>Prices for filling are to include for all necessary density and other tests</p> <p><b><u>Site clearance</u></b></p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth</p> <p><b><u>EXCAVATION, FILLING, ETC</u></b></p> <p><b><u>Excavation in earth not exceeding 2m deep</u></b></p> <p>2 Trenches and holes</p> <p><b><u>Extra over trench and hole excavations in earth for breaking up and removing</u></b></p> <p>3 Soft rock</p> <p>4 Hard rock</p> <p><b><u>Extra over all excavations for carting away</u></b></p> <p>5 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 14            GUARD HOUSE &amp; REFUSE AREA            Bill No. 1            Earthworks (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Compaction of ground surfaces</u></b>				
6	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density LAYER WORK	m2	18		
	<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
8	In prescribed stock piles on site	m3	3		
	<b><u>Earthfilling of 150mm thick G7 natural gravel compacted to 95% Mod Asstho Density</u></b>				
9	Under surface beds in 150mm layer	m3	3		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
10	Modified AASHTO Density test	No	2		
11	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	2		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 1 Earthworks (Provisional)				

Section No. 14				
Bill No. 1				
Earthworks (Provisional)				
<b><u>COLLECTION</u></b>				
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		411		
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		413		
<b>Carried Forward to Summary of Section No. 14</b>				
Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 1 Earthworks (Provisional)			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14            GUARD HOUSE &amp; REFUSE AREA            Bill No. 2            Concrete Formwork &amp; Reinforcement</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>				
1	Surface blinding under footings and bases	m3	1		
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Strip footings	m3	6		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
3	Surface beds on waterproofing (including thickenings)	m3	3		
	<b><u>TEST CUBES</u></b>				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	4		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
5	<u>Finishing top surfaces of concrete smooth with a steel trowel</u> Surface beds, slabs, etc to falls	m2	18		
6	<u>Finishing top surfaces of concrete smooth with a wood float</u> Surface beds, slabs, etc to falls and currents	m2	1		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	24		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
8	Not exceeding 300mm high to edges of surface beds	m	5		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
9	3 x 35mm Saw-cut joints in top of concrete including 8xream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	5		
10	3 x 40mm Saw-cut joints in top of concrete	m	5		
	<b><u>Horizontal construction joints through concrete including thick cement slurry to one face</u></b>				
11	Surface beds not exceeding 300mmm thick as per engineers details	m	22		
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High tensile steel reinforcement to structural concrete work</u></b>				
12	Y10mm Diameter bars	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
13	Y8mm Diameter bars  <b><u>Fabric reinforcement</u></b>	t	1.00		
14	Type 193 fabric reinforcement in concrete surface beds etc	m2	18		
<b>Carried to Collection</b>					R
Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 2 Concrete Formwork & Reinforcement					

Section No. 14				
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Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
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		415		
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GUARD HOUSE & REFUSE AREA				
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Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b>  <b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing</p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BLOCKWORK</u></b></p> <p><u>Concrete masonry units</u></p> <p>Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa</p> <p><u>Wall ties for blockwork</u></p> <p>Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other Blockwork</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14                  GUARD HOUSE &amp; REFUSE AREA                  Bill No. 3                  Masonry</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Blockwork shall comply with SANS 10145 "Concrete Masonry Construction" Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole Standard complementary blocks</p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>DECORATIVE BLOCKS</u></b></p> <p>Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour</p> <p><b><u>BRICKWORK</u></b></p> <p>Description of brickwork is measured inclusive of all reinforcement, mortar, ties, mortar fillet and closing of cavities and rates should be inclusive of such</p> <p><b><u>FOUNDATIONS (PROVISIONAL)</u></b></p>				
1	300mm Hollow walls of two half brick skins	m2	18		
	<p><b><u>SUPERSTRUCTURE</u></b></p> <p><b><u>Brickwork of NFP bricks in class II mortar in load bearing walls</u></b></p>				
2	Half brick walls	m2	1		
3	Half brick walls in beamfilling	m2	3		
4	One brick walls	m2	36		
	<p><b><u>Steel bar reinforcement</u></b></p>				
5	8mm Diameter high tensile steel bars built in horizontally	t	1.00		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 3 Masonry				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Prestressed fabricated concrete lintels including necessary temporary supports</u></b>				
6	75 x 110mm Lintels in lengths not exceeding 3m	m	5		
	<b><u>Air bricks etc</u></b>				
7	229 x 152mm Terracotta vermin proof air brick	No	2		
	<b><u>FACE BRICKWORK</u></b>				
	<b><u>Sapphire Imperial FBS clay face brick, jointed in Class II mortar and pointed with flush vertical and flush horizontal joints</u></b>				
8	Extra over brickwork for face brickwork for one side of one brick wall	m2	32		
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar on top of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
9	220mm Copings on top of one brick walls	m	5		
10	Facebrick concrete lintel	m	5		
	<b><u>WINDOW SILLS</u></b>				
	<b><u>Brick-on-edge header course copings, sills, lintels, etc of "Sapphire Imperial FBS Clay" face bricks laid into mortar on top of 375 micron damp course waterproof sheeting wrapped back behind cill brick to underside of window section, pointed with flush recessed joints on all exposed faces.</u></b>				
11	110mm Facebrick window sills flat and slightly projecting	m	5		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 3 Masonry				

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<b><u>COLLECTION</u></b>					
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Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 14</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>WATERPROOFING</u></b>				
	<u>Waterproofing</u>				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	5		
	<b><u>One layer 250 micron green polyethylene waterproof sheeting SANS 952-1985 type C sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	18		
3	Vertically between walls	m2	10		
	<b><u>Mastic or silicone sealing compound including backing cord, bond breaker, primer, etc</u></b>				
4	6 x 10mm In saw cut joints in floors	m	24		
	<b>Carried Forward to Summary of Section No. 14</b>				
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 4 Waterproofing				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 14</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>ROOF COVERINGS</u></b>				
	<b><u>ROOF COVERINGS, CLADDINGS, ETC</u></b>				
	Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the "Carpentry and Joinery" trade and not under this trade				
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>				
	<b><u>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses</u></b>				
1	Roof covering with pitches not exceeding 25 degrees	m2	20		
2	Side cladding not exceeding 250mm	m2	3		
3	Gable end side cladding exceeding 250mm	m2	3		
4	Ridge or Valley flashing	m	6		
5	Ridge Closer	m	6		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m<sup>2</sup> and a Class I fire rating in accordance with SANS 0177-3</u></b>				
6	135mm Lightweight non combustible fibre glass Insulation blanket laid taut over purlins at approximately 750mm centres and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	8		
	<b>Carried Forward to Summary of Section No. 14</b>				
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 5 Roof Coverings, Claddings, etc.			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY &amp; JOINERY</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Trusses are at maximum 750mm centres</p> <p>0.6mm Colomate finished galvanised metal IBR roof Sheeting @ 15 degrees pitch laid on insulation fixed to timber purlins and trusses Roof covering is type on purlins</p> <p>Ceiling is 6mm sheeting edge flush plastered on 38 x 38mm brandering</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered C100 RevA annexed to these bills of quantities accompanying these bills of quantities for tender purposes Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 6 Carpentry and Joinery</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Sawn softwood grade S5/S7</u></b>				
1	Roof construction to double pitched roof with two hipped ends, 9.5 x 8.04m overall on plan x 1.423m high overall, including trusses, jack rafters, permanent bracing and 76 x 50mm battens at 750mm + 38 x 38mm purlins centres for roof covering (wall plates elsewhere) complete and signed of by engineer	No	1		
2	Wall plates	m	24		
	<b><u>SKIRTINGS</u></b>				
	<b><u>12mm Thick MDF adjustable skirting, pre-finish white</u></b>				
3	28mm x 100mm high Skirtings	m	10		
	<b><u>EAVES, VERGES, ETC</u></b>				
	<b><u>Sawn softwood</u></b>				
4	78 x 78mm Branders	m	16		
5	250 x 20mm Barge boards	m	5		
6	250 x 20mm Fascias	m	5		
	<b><u>TIMBER DOORS, WINDOWS, ETC</u></b>				
	<b><u>Fire doors</u></b>				
	<b><u>Fire doors are to be in accordance with SANS 1253</u></b>				
	<b><u>DOORS ETC</u></b>				
7	813 x 2032 x 40mm Solid core flush masonite panel door	No	1		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 6 Carpentry and Joinery				

Section No. 14				
Bill No. 6				
Carpentry and Joinery				
<b><u>COLLECTION</u></b>				
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		426		
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<b>Carried Forward to Summary of Section No. 14</b>				
Section No. 14				
GUARD HOUSE & REFUSE AREA				
Bill No. 6				
Carpentry and Joinery			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b> <b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><b><u>NAILED-UP CEILINGS</u></b></p> <p><b><u>9.8MM GYPSUM CEILING BOARD FIXED TO 38 X 38 MM BATTENS</u></b></p> <p>1 Ceilings nailed-up not exceeding 1m below roof trusses</p> <p><b><u>Cornice, perimeter trims, etc.</u></b></p> <p><b><u>Cove Cornice</u></b></p> <p>2 Cornice</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 14</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 7 Ceilings, Partitions and Access Flooring</p>				
1	Ceilings nailed-up not exceeding 1m below roof trusses	m2	8		
2	Cornice	m	10		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration</p> <p><b><u>HINGES, BOLTS, ETC</u></b></p> <p><b><u>Manufactured by Dorma or equally approved</u></b></p> <p><b><u>Measured per door</u></b></p>				
1	Stainless Steel floor mounted door stop size 24 x 45mm, 2 x two ball bearing butt hinge with Stainless Steel finish. 4 Lever lockset with Satin Chrome handle finish including powder coated 4 lever lock with Zinc backplate.	No	1		
	<p><b><u>Signage</u></b></p> <p><b><u>School signage</u></b></p>				
2	Clear Perspex with 150mm white vinyl arial font signage fixed to plastered wall with 60mm plug and 8 mm mirror screws	m2	3		
3	Clear Perspex with 80mm white vinyl arial font signage fixed to plastered wall with 60mm plug and 8 mm mirror screws	m2	2		
4	Clear perspex with colour vinyl logo signage fixed to plastered wall with 60mm plug and 8mm mirror screws	m2	1		
	<p><b>Carried Forward to Summary of Section No. 14</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 8 Ironmongery</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>STRUCTURAL STEELWORK</u></b></p> <p>Consideration is to be given in specific applications (e.g. where "heavy" steel structures such as in industrial plants, towers for mine shafts, etc are dominant) to implement the principles laid down by the "Measurement for Structural Steelwork" as prepared and recommended by the South African Institute of Steel Construction or any other appropriate principles This bill is, however, based on the building work measuring system Finishing-off painting is to be included in this trade only when the structural steel contractor is required to execute the work</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><b><u>STRUCTURAL STEELWORK</u></b></p> <p><b><u>STEEL COLUMNS AND BEAMS</u></b></p> <p><b><u>Welded beams and purlins etc. with flat bearer and connection plates, bolted to steel</u></b></p> <p>100 x 100mm SHS stanchions at 9.10 kg / m</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 14</b></p> <p>Section No. 14                      GUARD HOUSE &amp; REFUSE AREA                      Bill No. 9                      Structural Steelwork</p>	kg	27		
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>METALWORK</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed For purpose made windows and doors, refer to drawings annexed to these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 10 Metalwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>3 A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process</p> <p>4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked</p> <p>5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p>STEEL STAIRS</p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b></p> <p><b><u>1,2mm Double rebated frames suitable for one brick walls WITH 1 PAIR OF HINGES</u></b></p>				
1	<p>Frame for 813 x 2032 x 40mm door</p> <p><b><u>Aluminium</u></b></p> <p><b><u>Aluminium windows doors etc.</u></b></p>	No	1		
2	<p>1190 h x 2160 w + 1190h x 930w + 1190 h x 930w Standard aluminium frame in configuration as shown with or without opening sections as shown, complete with heavy-duty hinges, latches and restrictors (max. 100mm). Waterproof frame surround and joints with an approved soft seal. Polyester powder coated. All to AAAMSA standards and Architects approval. Windows to be glazed to SANS min. standards - 6.4mm double glazed Low-E glass</p>	No	1		
	<b>Carried to Collection</b>			R	
	<p>Section No. 14            GUARD HOUSE &amp; REFUSE AREA            Bill No. 10            Metalwork</p>				

Section No. 14					
Bill No. 10					
Metalwork					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		432			
		433			
<b>Carried Forward to Summary of Section No. 14</b>					
Section No. 14					
GUARD HOUSE & REFUSE AREA					
Bill No. 10					
Metalwork					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b> <b><u>BILL NO. 11</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>GRANOLITHIC</u></b></p> <p><u>Method</u></p> <p>The method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p> <p><u>Mix</u></p> <p>Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic</p> <p><u>Panels</u></p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 11 Plastering</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints</p> <p><u>Laying</u></p> <p>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels</p> <p>Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels</p> <p>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated</p> <p><u>Curing, seasoning and protection</u></p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Self levelling Screeds on concrete</u></b></p>				
1	30mm Thick self levelling screed on floors and landings	m2	8		
	<p><b><u>INTERNAL PLASTER</u></b></p> <p><b><u>Plaster mix for rough brick walls, composed of 1 part : and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls, in accordance with SANS 50197-1</u></b></p>				
2	On walls	m2	30		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 11 Plastering				

Section No. 14					
Bill No. 11					
Plastering					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		435			
		436			
<b>Carried Forward to Summary of Section No. 14</b>					
Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 11 Plastering					

Item No	Description	Unit	Quantity	Rate	Amount
1	<p><b><u>SECTION NO. 14</u></b> <b><u>BILL NO. 12</u></b></p> <p><b><u>TILING</u></b></p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><b><u>FLOOR TILING</u></b></p> <p><b><u>BEIGE MATT 350 x 350mm CERAMIC FLOOR TILES</u></b></p> <p>On new screeded floors</p> <p style="text-align: right;"><b>Carried Forward to Summary of Section No. 14</b></p> <p>Section No. 14 GUARD HOUSE &amp; REFUSE AREA Bill No. 12 Tiling</p>	m2	8		
					R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 14</u></b>  <b><u>BILL NO. 13</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><b><u>PAINT SPECIFICATIONS</u></b></p> <p>All painting shall be done in accordance with "Dulux" specifications unless otherwise described</p> <p><b><u>COLOURS</u></b></p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 14            GUARD HOUSE &amp; REFUSE AREA            Bill No. 13            Paintwork</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>				
	<b><u>ON FLOATED PLASTER</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new interior cement plaster. One coat Primer and with two coats PVA</u></b>				
1	On internal walls	m2	28		
	<b><u>ON PLASTER BOARD</u></b>				
	<b><u>Superior quality PVA acrylic paint (colour to be selected) to new gypsum ceilings. One coat Primer and finish with two coats Acrylic PVA</u></b>				
2	On ceilings	m2	8		
3	On cornice not exceeding 300mm girth	m	10		
	<b><u>ON METAL</u></b>				
	<b><u>Contractors Gloss Enamel (colour to be selected) to new exterior galvanised steel. One coat Primer for Steel, undercoat with one coat Universal Undercoat and two coats Contractors Gloss Enamel</u></b>				
4	On door frames	m2	2		
	<b><u>Painted with Carbolineum paint as per architects specification</u></b>				
5	On exposed trusses	m2	4		
	<b>Carried to Collection</b>				R
	Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 13 Paintwork				

Section No. 14 Bill No. 13 Paintwork <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 439		<b>Amount</b>
		440		-----
				-----
<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 14</b></p>			R	
Section No. 14 GUARD HOUSE & REFUSE AREA Bill No. 13 Paintwork				

Bill No	Section No. 14 GUARD HOUSE & REFUSE AREA <b>SECTION SUMMARY - GUARD HOUSE &amp; REFUSE AREA</b>	Page No	Amount
1	Earthworks (Provisional)	414	
2	Concrete Formwork & Reinforcement	419	
3	Masonry	423	
4	Waterproofing	424	
5	Roof Coverings, Claddings, etc.	425	
6	Carpentry and Joinery	428	
7	Ceilings, Partitions and Access Flooring	429	
8	Ironmongery	430	
9	Structural Steelwork	431	
10	Metalwork	434	
11	Plastering	437	
12	Tiling	438	
13	Paintwork	441	
	<b>Carried to Final Summary</b>		R
	Section No. 14 GUARD HOUSE & REFUSE AREA		

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 15</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><u>The following are typical examples of descriptions of "nature of ground" Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"</p> <p>The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, all of which will be deemed as "earth", but possibly interspersed with "hard rock" Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth"</p> <p>A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site Filling and layer work materials</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 15                      EXTERNAL WORKS                      Bill No. 1                      Earthworks (Provisional)</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter User note				
	When no information regarding density and other tests is available the following preamble in respect of testing may be inserted				
	<u>Testing</u>				
	Prices for filling are to include for all necessary density and other tests				
	<b><u>Site clearance</u></b>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	3 712		
2	Removal of existing tree exceeding 200mm girth	No	8		
	<b><u>BULK EXCAVATION, FILLING, ETC</u></b>				
	<b><u>Digging up topsoil</u></b>				
3	Digging up topsoil to an average depth of 150mm and preserving for use as filling Open face excavation in earth over sloping site	m2	947		
4	excavations in earth n.e 2m deep below NGL in open face excavations	m3	153		
	<b><u>Extra over bulk excavations in earth for breaking up and removing</u></b>				
5	Brickwork	m3	3		
6	Unreinforced concrete	m3	5		
7	Reinforced concrete	m3	1		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks (Provisional)				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Extra over all excavations for carting away</u></b>				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	747		
	<b><u>Keeping excavations free of water</u></b>				
9	Keeping excavations free of water other than subterranean water		Item		
	<b><u>FILLING ETC</u></b>				
	<b><u>Earth filling obtained from the excavations, including haulage approximately 150m from perimeter of excavations (not compacted)</u></b>				
10	In prescribed stock piles on site	m3	141		
	<b><u>Filling of natural gravel material G6 supplied by the contractor, compacted to 95% Mod AASHTO density</u></b>				
11	Under floors, steps, pavings, etc	m3	233		
	<b><u>Compaction of surfaces</u></b>				
12	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density TESTS	m2	771		
	<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u></b>				
13	Modified AASHTO Density test	No	25		
14	Field Density test including "Optimum Moisture Content" test (four readings per test)	No	10		
	<b>Carried to Collection</b>				
	Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks (Provisional)			R	

Section No. 15				
Bill No. 1				
Earthworks (Provisional)				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		443		
		444		-----
		445		-----
<b>Carried Forward to Summary of Section No. 15</b>				
Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks (Provisional)				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 15</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p> <p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/m<sup>3</sup> for the top 50mm and 400kg/m<sup>3</sup> for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 15 EXTERNAL WORKS Bill No. 2 Concrete Formwork &amp; Reinforcement</p>				<p style="text-align: right;">R</p>

Item No	Description	Unit	Quantity	Rate	Amount
	<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks</p> <p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
1	Strip footings and bases	m3	94		
	<p><b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>				
2	Surface beds including ramps and stairs	m3	72		
3	Apron and plinths	m3	43		
	<b><u>TEST CUBES</u></b>				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	27		
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>				
5	Surface beds, slabs, etc to falls and currents	m2	747		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<b><u>Rough formwork to sides</u></b>				
6	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	1 272		
	<b><u>Smooth Formwork</u></b>				
7	To sides of bases and footings	m2	316		
	<b><u>Chamfer</u></b>				
8	25 x 25mm chamfered edged	m	80		
	<b><u>MOVEMENT JOINTS ETC</u></b>				
	<b><u>Expansion joints with 10mm softboard and sealant between vertical concrete and brick surfaces</u></b>				
9	Not exceeding 300mm high to edges of surface beds	m	370		
	<b><u>Expansion joints with between vertical concrete surfaces, including necessary formwork</u></b>				
10	3 x 35mm Saw-cut joints in top of concrete including 8mm ream and 10mm backing cord with 8 x 13mm sealant (exposed slabs)	m	672		
	<b><u>REINFORCEMENT</u></b>				
	<b><u>High steel reinforcement to structural concrete work</u></b>				
11	Y12mm Diameter bars	t	3.00		
12	Y10mm Diameter bars	t	5.00		
13	Y16mm Diameter bars	t	1.00		
	<b><u>Fabric reinforcement</u></b>				
14	Type 193 fabric reinforcement in concrete surface beds etc	m2	765		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 2 Concrete Formwork & Reinforcement				

Item No	Description	Unit	Quantity	Rate	Amount
15	<p><b>Concrete Bollard</b></p> <p>SA Bollards - Komati Drinking Fountain (137KG) radius of 125mm coated in a grey aggregate finish</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 15                      EXTERNAL WORKS                      Bill No. 2                      Concrete Formwork &amp; Reinforcement</p>	No	12		

Section No. 15				
Bill No. 2				
Concrete Formwork & Reinforcement				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		447		
		448		
		449		
		450		
<b>Carried Forward to Summary of Section No. 15</b>				
Section No. 15				
EXTERNAL WORKS				
Bill No. 2				
Concrete Formwork & Reinforcement			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 15</u></b> <b><u>BILL NO. 3</u></b></p> <p><b><u>PAVING</u></b></p> <p><b><u>Specialist paving brick</u></b></p>				
1	Paving in brick-on-edge roller course with mortar jointing to edge of reinforced concrete walkway	m	1 462		
	<p><b><u>Brick paving of 80mm</u></b></p>				
2	New 80mm Concrete pavers for roads, walkways etc. grouted with mortar or river sand on levelled and compacted floor with 150mm G7 underneath	m2	2 200		
	<p><b><u>Temporary paving</u></b></p>				
3	Temporary paving for the decanting area including making level earth and sanding layer underneath	m2	1 020		
	<p><b>Carried Forward to Summary of Section No. 15</b></p>				
	<p>Section No. 15 EXTERNAL WORKS Bill No. 3 Paving</p>				R

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 15</u></b></p> <p><b><u>BILL NO. 4</u></b></p> <p><b><u>STRUCTURAL STEELWORK &amp; METALWORK</u></b></p> <p>Consideration is to be given in specific applications (e.g. where "heavy" steel structures such as in industrial plants, towers for mine shafts, etc are dominant) to implement the principles laid down by the "Measurement for Structural Steelwork" as prepared and recommended by the South African Institute of S teel Construction or any other appropriate principles This bill is, however, based on the building work measuring system Finishing-off painting is to be included in this trade only when the structural steel contractor is required to execute the work</p> <p>Finishing-off painting is to be included in this trade</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><b><u>STEEL COLUMNS AND BEAMS</u></b></p> <p><b><u>Welded beams and purlins etc. with flat bearer and connection plates, bolted to steel</u></b></p>				
1	75 x 50 x 3 RHS Stanchions/columns	t	2.00		
2	100 x 50 x 3 RHS Rafter	t	3.00		
	<b>Carried to Collection</b>				
	Section No. 15 EXTERNAL WORKS Bill No. 4 Structural Steelwork & Metalwork				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
3	125 x 50 x 20 x 3 CFLC Purlins	t	5.00		
4	50 x 50 x 3L Eaves, Bracings	t	2.00		
	<b><u>Chromadek roof sheeting for walkways to match roofing colour</u></b>				
5	Corrugated Chromadek sheeting @ 3 degree pitch fixed to lip channel including edges, flashing etc.	m2	760		
	<b><u>Balustrading</u></b>				
6	New Balustrade made up off 50mm x 50mm Mild Steel baluster welded to 100mm x 100mm MS plate bolted to RC upstand and 50mm x 50mm Horizontal Mild Steel Tubing (Handrail) welded to 50mm x 50mm Vertical Mild Steel Baluster and 25mm x 25mm Mild Steel Horizontal Tubing Welded to 50mm x 50mm Mild Steel Vertical Baluster 100mm x 100mm Mild Steel plate bolted to RC base with 4No. M10 rawl bolts	m	10		
	<b><u>FENCING</u></b>				
7	High density anti-climbing and anti-cut pressed mesh panel fencing 2400mm high, formed of 4mm diameter horizontal and 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with marine fusion bond coating black in colour with aperture size 76.2 x 12.7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking post 2400mm high including locking recess mechanism at 3382mm centres with sealed end caps and 30 x 3mm 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep. Including spikes along top	m	575		
8	5.2m Wide sliding gate including motor, telecoms, excavation, concrete sliding rails, posts bolts etc. complete	No	1		
9	1.465m Wide swing gate including telecoms, excavations, concrete sliding rails, posts bolts etc. complete	No	1		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 4 Structural Steelwork & Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
10	0.789 x 2020mm High mild steel gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. Painted 1 coat zinc chromate primer, 2 coats exterior finish gloss enamel , colour to architect's specification 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks	No	8		
11	1872 x 2100mm Mild steel Double gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. Painted 1 coat zinc chromate primer, 2 coats exterior finish gloss enamel , colour to architect's specification 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks	No	1		
12	980 x 1800mm Mild steel gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks	No	3		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 4 Structural Steelwork & Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
13	900 x 2000mm Mild steel pedestrian gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks. Electric door lock opener	No	1		
14	3180 x 2100mm High mild steel double gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks	No	2		
15	1500 x 2210mm High mild steel gate consisting of 10 x10mm mild steel square bars fixed at 100mm centres at with heavy duty hinges that allows the gate to open up to 90 degrees. Painted 1 coat zinc chromate primer, 2 coats exterior finish gloss enamel , colour to architect's specification 50 X 50mm mild steel square tube welded to form frame. Painted Refer to finishes schedule, 2 x coats gloss enamel (exterior quality) Custom made barrel bolts mechanism to specialist design & installation; materials, fixing and installation are to be in compliance with SANS requirements. Barrel bolts to be locked with Heavy duty weatherproof padlocks	No	1		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 4 Structural Steelwork & Metalwork				

Section No. 15				
Bill No. 4				
Structural Steelwork & Metalwork				
<b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>
		453		
		454		
		455		
		456		
<b>Carried Forward to Summary of Section No. 15</b>				
Section No. 15				
EXTERNAL WORKS				
Bill No. 4				
Structural Steelwork & Metalwork				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 15</u></b></p> <p><b><u>BILL NO. 5</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p>Stormwater channels</p> <p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site French drains</p> <p><u>Sealing of edges</u></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p> <p><u>PVC-U pipes and fittings</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><u>PVC-U pressure pipes and fittings</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>High density polyethylene (HDPE) pipes and fittings</u></p> <p>Pipes shall be type IV and of the class specified with compression fittings Polypropylene pipes</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 15 EXTERNAL WORKS Bill No. 5 Plumbing &amp; Drainage (Provisional)</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p><u>Copper pipes</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Capillary solder fittings shall comply with ISO 2016 Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and 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 Fixing of pipes</p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion</p>				
	<b>Carried to Collection</b>				R
	<p>Section No. 15 EXTERNAL WORKS Bill No. 5 Plumbing &amp; Drainage (Provisional)</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001</p> <p><u>General</u></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes</p> <p><u>As-built drawings</u></p> <p><b><u>Rainwater collection</u></b></p>				
1	Approved 5000l water tanks installed with all valves and connections, pipework measured elsewhere	No	2		
	<b><u>SANITARYWARE</u></b>				
2	Stainless steel push tap drinking fountain connected to socket and 22mm steel pipe 1,2m long connected to water supply	No	8		
	<b>Carried to Collection</b>				R
	Section No. 15 EXTERNAL WORKS Bill No. 5 Plumbing & Drainage (Provisional)				



Section No. 15  Bill No. 5  Plumbing & Drainage (Provisional)  <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 458		<b>Amount</b>
		459		-----
		460		-----
		461		-----
<p align="center"><b>Carried Forward to Summary of Section No. 15</b></p>			R	
Section No. 15 EXTERNAL WORKS Bill No. 5 Plumbing & Drainage (Provisional)				



Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 16</u></b>				
	<b><u>BILL NO. 1</u></b>				
	<b><u>FURNITURE</u></b>				
	<b><u>Furniture as per schedule and references, as per below</u></b>				
	Ref: DBSA-MBO-S1-ARCH-S4.101 - Furniture Specifications + DBSA-MBO-S1-ARCH-S4.100 - Furniture Schedule + DBSA-MBO-S1-ARCH-S1.100 - Specifications				
	<b><u>Preferred and recommended suppliers are as follows.</u></b>				
	Thuthuka Office Supplies + Insight Office Supplies + Oshlanga Enterprise CC + Rickshaw Trade & Investment + Reboni Furniture Manufacturing + Indigenous Timber JV BNTS Consultants + Budget Office Furnitures + Milani Furnitures				
	<b><u>EXISTING CLASSROOM BLOCK 1, 2, 3, 4, 5</u></b>				
1	Grade 1-3 Single combination primary desk	No	200		
2	Grade 4 - 6 Single combination primary desk	No	205		
3	Grade 7 single combination primary desk	No	210		
4	Teachers Desk with 2 Drawers	No	5		
5	Upholstered chair without arms	No	5		
6	3-46-00 Stat cupboard : 4 adjustable shelves & lock doors	No	5		
	<b><u>HOD OFFICE AND WORK ROOMS</u></b>				
7	Upholstered chairs with arms	No	4		
8	Stationary cupboards 2 door + shelves	No	4		
9	3-21-25 Office desk : 2 drawers (top drawer, lock)	No	4		
	<b>Carried to Collection</b>				
	Section No. 16 FURNITURE Bill No. 1 Furniture				
				R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>NEW ADMIN BLOCK</u></b>				
10	Filing rack pigeon hole 30 division	No	3		
11	3-20-14 Coffee table (N/Oak)	No	30		
12	3-94-04 Side chair with arms	No	30		
13	Upholstered chairs with arms	No	8		
14	3-49-10 Steel hat and coat stand	No	4		
15	3-46-00 Steel stationery cupboard	No	2		
16	Steel frame single bed with bedding sheets etc x 3 sets	No	2		
17	Principle desk connecting corner piece	No	2		
18	Principle desk with 3 drawers fitter on right hand side	No	2		
19	Filing cabinet with 4 drawers	No	2		
20	High back swivel & tilt chair with 5-star base	No	2		
21	Correspondence rack 3 division	No	1		
22	Wooden glazed door bookcase with 3 shelves	No	1		
	<b><u>Grade R</u></b>				
23	3-30-02 Pre-school (6 seater) table	No	5		
24	3-23-040 "Tech" Stackable chair	No	33		
25	Steel frame single bed with bedding sheets etc x 3 sets	No	2		
26	Upholstered chairs with arms	No	2		
	<b><u>Science &amp; media lab</u></b>				
27	Lab Chair	No	30		
28	Double stackable school table (not standard height)	No	15		
29	Upholstered chairs with arms (not standard height)	No	17		
	<b>Carried to Collection</b>				R
	Section No. 16 FURNITURE Bill No. 1 Furniture				

Item No	Description	Unit	Quantity	Rate	Amount
30	Stationery cupboards 2 door + shelves	No	2		
31	3-21-25 Office desk : 2 drawers (top drawer, lock)	No	2		
	<b><u>Guard House</u></b>				
32	3-22-01 Sec Adult chair : Large Orange seat	No	2		
33	3-21-25 Teacher's desk : 2 drawers : saligna	No	1		
	<b><u>External Furniture</u></b>				
34	Playground climbing stairs with swings	No	2		
35	Slides	No	4		
36	Playground system	No	2		
37	Other accessories	No	4		
	<b>Carried to Collection</b>				
	Section No. 16 FURNITURE Bill No. 1 Furniture				R

Section No. 16					
Bill No. 1					
Furniture					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		464			
		465		-----	
		466		-----	
<b>Carried to Final Summary</b>				R	
Section No. 16 FURNITURE Bill No. 1 Furniture					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 17</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PROVISIONAL SUMS</u></b></p> <p>Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant JBCC building agreement and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances</p> <p>Prime cost amounts and provisional sums are net. Prime cost amounts shall include for delivery to site of all articles concerned Provisional sums are for material and equipment supplied and installed complete by firms of specialists Profit</p> <p>Where stated, the contractor may allow for profit if required</p> <p>The item "attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors the contractor's duties as described in clause 12.2 of the JBCC N/S Subcontract Agreement</p> <p>Special attendance on nominated/selected subcontractors</p> <p>Where "special attendance" such as unloading, storing, placing in position, providing special power supplies, specific hoisting, crane and scaffolding requirements, provision of temporary casing and/or other specific protection of the works, special security and clearing away rubbish is required, a separate item describing the specific requirements in detail is to be provided for the pricing of such requirements Builder's work</p> <p>Builder's work in connection with specialist services is given elsewhere in these bills of quantities</p>				
	<b>Carried to Collection</b>				
	<p>Section No. 17                      PROVISIONAL SUMS                      Bill No. 1                      Provisional Sums</p>			R	

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Landscaping (soft and hard allowance)</u></b>				
1	Provide the sum of R 300 000 for landscaping including irrigation		Item		300 000.00
2	Profit		Item		
3	Attendance		Item		
	<b><u>Electronic installation (telecoms and alarm - backbone conduiting elsewhere)</u></b>				
4	Provide the sum of Cur R 150 000 for electronic installation		Item		150 000.00
5	Profit		Item		
6	Attendance		Item		
	<b><u>Borehole Moving &amp; Upgrade</u></b>				
7	Provide the sum of R 95 000 for Borehole relocation/redrilling + new filter		Item		95 000.00
8	Profit		Item		
9	Attendance		Item		
	<b><u>CCTV (backbone elsewhere)</u></b>				
10	Provide the sum of R 65 000 installation, data cabling, etc		Item		65 000.00
11	Profit		Item		
12	Attendance		Item		
	<b><u>Kitchen equipment installation</u></b>				
13	Provide the sum of R 300 000 for kitchen equipment installation		Item		300 000.00
14	Profit		Item		
15	Attendance		Item		
	<b>Carried to Collection</b>			R	
	Section No. 17 PROVISIONAL SUMS Bill No. 1 Provisional Sums				

Item No	Description	Unit	Quantity	Rate	Amount
	<b><u>Solar Set Up</u></b>				
16	Provide the sum of R 105 000 for solar Set Up		Item		105 000.00
17	Profit		Item		
18	Attendance		Item		
	<b><u>Allowance of temporary traffic accommodation</u></b>				
19	Allow a sum of 126 000 for temporary road signs, cones, etc. to allow for traffic flow		Item		126 000.00
20	Profit		Item		
21	Attendance		Item		
	<b><u>Budgetary Allowance for the Employment of a Community Liaison Officer for the Duration of the Project (CLO)</u></b>				
22	Allow a sum of R 65 000 for CLO Appointment		Item		65 000.00
	<b><u>Budgetary Allowance for the Employment of a 2No. Built Environment Graduates for the duration of the Project</u></b>				
23	Allow a sum of R 192 000.00 for Appointment of Graduates		Item		192 000.00
	<b><u>Budgetary Allowance for Escallation (CPAP)</u></b>				
24	Allow a sum of R 391 518,57 for CPAP		Item		391 518.57
	<b>Carried to Collection</b>			R	
	Section No. 17 PROVISIONAL SUMS Bill No. 1 Provisional Sums				

Section No. 17					
Bill No. 1					
Provisional Sums					
<b><u>COLLECTION</u></b>					
Total Brought Forward from Page No.		<b>Page No</b>		<b>Amount</b>	
		468			
		469		-----	
		470		-----	
<b>Carried to Final Summary</b>				R	
Section No. 17 PROVISIONAL SUMS Bill No. 1 Provisional Sums					

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 18</u></b></p> <p><b><u>CIVIL WORKS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Bidder is referred to the relevant clauses in a separate document 'SPECIFICATION OF MATERIALS AND METHODS TO BE USED PW 371A (Edition 2.1 July 2014) which is obtainable from Public Works website <a href="http://www.publicworks.gov.za/consultantguidelines">www.publicworks.gov.za/consultantguidelines</a></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>General:</u></b></p> <p><b><u>Amounts brought forward from Annexure A: Civil Works summary page :</u></b></p> <p>1 Civil Works - Preliminaries and General</p> <p>2 Paving</p> <p>3 Buried Services</p>				
	<b>Carried to Final Summary</b>				R
	<p>Section No. 18                      CIVIL WORKS                      Bill No. 1                      Civil Works</p>				

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 19</u></b></p> <p><b><u>ELECTRICAL INSTALLATION</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Bidder is referred to the relevant clauses in a separate document 'SPECIFICATION OF MATERIALS AND METHODS TO BE USED PW 371A (Edition 2.1 July 2014) which is obtainable from Public Works website <a href="http://www.publicworks.gov.za/consultantguidelines">www.publicworks.gov.za/consultantguidelines</a></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>General:</u></b></p> <p><b><u>Amounts brought forward from Annexure B:</u></b>  <b><u>Electrical Installations summary page :</u></b></p>				
1	Complete installation, reticulation, electrical, telephone, intercom and bell system		Item		
2	ADMIN BLOCK, INTERNAL ELECTRICAL INSTALLATION		Item		
3	ADMIN BLOCK, LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM		Item		
4	New Grade R INTERNAL ELECTRICAL INSTALLATION		Item		
5	New Grade R LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM		Item		
6	Existing Block 1 & 2 INTERNAL ELECTRICAL INSTALLATION		Item		
7	Existing Block 1 & 2 LUMINAIRES AND WIREWAYS		Item		
8	New Nutrition Centre INTERNAL ELECTRICAL INSTALLATION		Item		
9	New Nutrition Centre LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM		Item		
	<b>Carried to Collection</b>				R
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation				

Item No	Description	Unit	Quantity	Rate	Amount
10	EXISTING Block 3 (8 x Class room) INTERNAL ELECTRICAL		Item		
11	EXISTING Block 3 (8 x Class room) LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM		Item		
12	EXISTING BLOCKS (Library, Multipurpose, Maths & Science) INTERNAL ELECTRICAL		Item		
13	EXISTING BLOCKS (Library, Multipurpose, Maths & Science) LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM		Item		
14	PROVISIONAL AMOUNTS		Item		
<p>NOTE: ALL RATES AND PRICES EXCLUDE 15% VAT.</p> <p>VAT WILL BE ADDED IN THE FINAL SUMMARY OF BILLS OF QUANTITIES -</p> <p>PART "A", I.E. IN THE BUILDER'S TENDER</p>					
<b>Carried to Collection</b>					R
<p>Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation</p>					

Section No. 19 Bill No. 1 Electrical Installation <b><u>COLLECTION</u></b>				
Total Brought Forward from Page No.		<b>Page No</b> 473		<b>Amount</b>
		474		-----
				-----
Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation			R	-----

**Carried to Final Summary**

Item No	Description	Unit	Quantity	Rate	Amount
	<p><b><u>SECTION NO. 20</u></b></p> <p><b><u>MECHANICAL INSTALLATION</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Bidder is referred to the relevant clauses in a separate document 'SPECIFICATION OF MATERIALS AND METHODS TO BE USED PW 371A (Edition 2.1 July 2014) which is obtainable from Public Works website <a href="http://www.publicworks.gov.za/consultantguidelines">www.publicworks.gov.za/consultantguidelines</a></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>General:</u></b></p> <p><b><u>Amounts brought forward from Annexure C: Mechanical Installations summary page :</u></b></p>				
1	Preliminary and General		Item		
2	Preambles		Item		
3	Fire Hydrants and Hose Reels Water Reticulation		Item		
4	Fire Hydrants, Fire Extinguishers and Signage		Item		
5	Tanks and Pumps - Fire Water Storage		Item		
6	Tanks and Pumps - Fresh Water Tank		Item		
7	Standard Rates		Item		
8	Extraction		Item		
9	Lab Gas		Item		
10	Nutrition Gas		Item		
	<b>Carried to Final Summary</b>				
	Section No. 20 MECHANICAL INSTALLATION Bill No. 1 Mechanical Installation				R

Section No	<u>FINAL SUMMARY</u>	Page No		Amount
1	PRELIMINARIES & GENERAL	20		
2	ALTERATIONS & DEMOLITIONS	27		
3	EXISTING CLASSROOMS BLOCK 1, 2, 3 & 4	45		
4	EXISTING LIBRARY	80		
5	EXISTING MULTI PURPOSE CLASSROOMS	94		
6	REFURB SCIENCE AND MULTIMEDIA CENTRE	139		
7	EXISTING ABLUTIONS (Male)	160		
8	EXISTING ABLUTIONS (Female)	181		
9	NEW HOD BLOCK 1 (double)	219		
10	NEW HOD BLOCK 4 (single)	257		
11	ADMIN & ADMIN BLOCK EXTENSION	306		
12	NEW NUTRITION CENTRE	359		
13	NEW GRADE R CLASSROOMS	410		
14	GUARD HOUSE & REFUSE AREA	442		
15	EXTERNAL WORKS	463		
16	FURNITURE	467		
17	PROVISIONAL SUMS	471		
18	CIVIL WORKS	472		
19	ELECTRICAL INSTALLATION	475		
20	MECHANICAL INSTALLATION	476		
	SUB-TOTAL EXCLUDING VAT		R	
	<b>ADD: Value-Added Tax @ 15%</b>		R	
	<b>Carried to Form of Offer and Acceptance</b>		R	