

Item No		Quantity	Rate	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><b><u>BUILDING AGREEMENT AND PRELIMINARIES</u></b></p> <p>The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described</p> <p>The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, 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>Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
1	<p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>The Model Preambles for Trades (1999 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 for Trades will be entertained</p> <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</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 Model Preambles and in any supplementary preambles</p> <p style="text-align: right;">m</p> <p><b><u>GENERAL</u></b></p> <p>If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value</p> <p><b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b></p> <p><b><u>Definitions (A1)</u></b></p> <p>Definitions and interpretation (clause 1)</p> <p>F:..... V:..... T:.....</p> <p style="text-align: right;">Item</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			
			R	

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>Objective and Preparation (A2 to A14)</u></b>			
	Offer acceptance and performance (clause 2)  F:..... V:..... T:.....	Item		
	Documents (clause 3)  F:..... V:..... T:.....	Item		
	Design responsibility (clause 4)  F:..... V:..... T:.....	Item		
	Employer's agents (clause 5)  F:..... V:..... T:.....	Item		
	The principal agent shall:  - monitor and control progress and scheduling  - monitor all contract conditions, and  - coordinate the efforts of the employer's agents, the contractor and subcontractors  The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part			
	<b>Carried Forward</b>		R	
	P's and G's  <b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process</p> <p>Site representative (clause 6)</p> <p>F:..... V:..... T:.....</p> <p>Compliance with regulations (clause 7)</p> <p>F:..... V:..... T:.....</p> <p>Works risk (clause 8)</p> <p>F:..... V:..... T:.....</p> <p>Indemnities (clause 9)</p> <p>F:..... V:..... T:.....</p> <p>Works insurances (clause 10)</p> <p>F:..... V:..... T:.....</p> <p>Liability insurances (clause 11)</p> <p>F:..... V:..... T:.....</p> <p>Effecting insurance (clause 12)</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	NO CLAUSE (Clause 13)			
	Security (clause 14)			
	F:..... V:..... T:.....	Item		
	<b><u>Execution (A15-A23)</u></b>			
	Preparation for and execution of the works (clause 15)			
	F:..... V:..... T:.....	Item		
	Access to the works (clause 16)			
	F:..... V:..... T:.....	Item		
	Contract instructions (clause 17)			
	F:..... V:..... T:.....	Item		
	Setting out of the works (clause 18)			
	F:..... V:..... T:.....	Item		
	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			
	Assignment (clause 19)			
	F:..... V:..... T:.....	Item		
	The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer			
	Nominated subcontractors (clause 20)			
	F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>Selected subcontractors (clause 21)</p> <p>F:..... V:..... T:.....</p> <p>Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted</p> <p>All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors</p> <p>Employer's Direct Contractors (clause 22)</p> <p>F:..... V:..... T:.....</p> <p>Contractor's Domestic Sub-Contractors (Clause 23)</p> <p>F:..... V:..... T:.....</p> <p><b><u>Completion (A24-A30)</u></b></p> <p>Practical completion (clause 24)</p> <p>F:..... V:..... T:.....</p> <p>Works completion (clause 25)</p> <p>F:..... V:..... T:.....</p> <p>Final completion (clause 26)</p> <p>F:..... V:..... T:.....</p> <p>Latent defects liability period (clause 27)</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Sectional completion (clause 28)  F:..... V:..... T:.....	Item		
	Revision of date of practical completion (clause 29)  F:..... V:..... T:.....	Item		
	The removal and replacement of materials and/or workmanship that 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 sum (clause 29.3)			
	Penalty for non-completion (clause 30)  F:..... V:..... T:.....	Item		
	<b><u>Payment (A31 - A35)</u></b>			
	Interim payment to the contractor (clause 31)  F:..... V:..... T:.....	Item		
	Adjustment to the contract value (clause 32)  F:..... V:..... T:.....	Item		
	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			
	Recovery of expense and loss (clause 33)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:..... Item			
	Final account and final payment (clause 34) F:..... V:..... T:..... Item			
	The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion			
	The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account			
	Payment to other parties (clause 35) F:..... V:..... T:..... Item			
	<b><u>Cancellation (A36-A39)</u></b>			
	Cancellation by employer - contractor's default (clause 36) F:..... V:..... T:..... Item			
	Cancellation by employer - loss and damage (clause 37) F:..... V:..... T:..... Item			
	Cancellation by contractor - employer's default (clause 38)			
	<b>Carried Forward</b>		R	
	P's and G's <b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>F:..... V:..... T:.....</p> <p>Cancellation - cessation of the works (clause 39)</p> <p>F:..... V:..... T:.....</p> <p><b><u>Dispute (A40)</u></b></p> <p>Dispute Settlement (clause 40)</p> <p>F:..... V:..... T:.....</p> <p><b><u>Substitute Provisions (A41)</u></b></p> <p>State clauses (Clause 41)</p> <p>F:..... V:..... T:.....</p> <p>Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder</p> <p><b><u>THE SCHEDULE</u></b></p> <p>Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder</p> <p>Pre-tender information (clause 42)</p> <p>F:..... V:..... T:.....</p> <p><b><u>42.1 CONTRACTING AND OTHER PARTIES</u></b></p> <p>42.1.1 Employer: THE MVULA TRUST</p> <p>42.1.2 Principal Agent: R Mahange and Associates</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p><b><u>42.2 CONTRACT DETAILS</u></b></p> <p>42.2.1 Works Description: Construction of sanitation facilities</p> <p>42.2.2 Site Description: as per the information on the tender data</p> <p>42.2.3 Work or installations by direct contractors: N/A</p> <p>42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only Yes</p> <p>42.2.5 Date on which possession of the site is intended to be given:  As per the information provided in the Tender Data</p> <p>42.2.6 Period for the commencement of the works after the contractor takes possession of site: 7 DAYS</p> <p>42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day Intended Date of Practical Completion: As per the information provided in the Tender Data</p> <p>Penalty Amount: The penalty per calendar day shall be 7.5 cents per R100 of the Tendered Amount (inclusive of value added tax)</p> <p>42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day  N/A</p> <p>42.2.9 The law applicable to this agreement shall be that of</p>			
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No	Quantity	Rate	Amount
<p><b>Brought Forward</b></p> <p style="text-align: center;"><i>South Africa (country)</i></p> <p><b><u>42.3 INSURANCES</u></b></p> <p>42.3.1 Contract works insurance to be effected by:</p> <p style="text-align: right;"><i>Contractor:</i> <i>For the Sum of R Contract Amount + 10.00 %</i> <i>With a deductible of - to be determined by the contractor</i></p> <p>42.3.2 Supplementary insurance is required</p> <p style="text-align: right;"><i>No</i></p> <p>42.3.3 Public liability insurance to be effected by:</p> <p style="text-align: right;"><i>Contractor:</i> <i>For the Sum of R 5 000 000-00</i> <i>With a deductible of - to be determined by the contractor</i></p> <p><b><u>42.4 DOCUMENTS</u></b></p> <p>42.4.1 Waivers of <b>contractors lien</b> or right of continuing possession is required</p> <p style="text-align: right;"><i>Yes</i></p> <p>42.4.2 Number of construction document copies to be supplied to the <b>contractor</b> free of charge:</p> <p style="text-align: right;"><i>3 Number of</i></p> <p>42.4.3 <b>Bills of Quantities/Lump sum document</b> schedule of rates drawn up in accordance with:</p> <p><i>"Standard System of Measuring Builders' Work"</i></p> <p>42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within</p> <p style="text-align: right;"><b>5 working days</b></p> <p style="text-align: right;"><i>The priced bills of quantities must be handed in with the tender</i></p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>		R	
		R	

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	42.4.5 JBCC Engineering General Conditions are to be included in the <b>contract documents</b> :			
	<i>No</i>			
	42.4.6 The contract value is to be adjusted using escalation adjustment indices			
	<i>No</i>			
	Where <b>JBCC CPAP</b> is to be used			
	Base Month <b>N/A</b>			
	42.4.7 Details of changes made to the provision of JBCC standard documentation:			
	Part 1 - Contract Data completed by Employer			
	<b><u>SECTION B: PRELIMINARIES</u></b>			
	<b><u>Definitions and interpretation (B1)</u></b>			
	Definition and interpretation (B1.1 - B1.4.6)			
	F:..... V:..... T:.....	Item		
	<b><u>Documents (B2)</u></b>			
	Checking of documents (B2.1)			
	F:..... V:..... T:.....	Item		
	Provisional bills of quantities (B2.2)			
	F:..... V:..... T:.....	Item		
	Availability of construction documentation (B2.3)			
	F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Interests of agents (B2.4) F:..... V:..... T:.....	Item		
	Priced documents (B2.5) F:..... V:..... T:.....	Item		
	Tender submission (B2.6) F:..... V:..... T:.....	Item		
	Defined works area (B3.1) F:..... V:..... T:.....	Item		
	<b><u>The site (B3)</u></b>			
	Geotechnical investigation (B3.2) F:..... V:..... T:.....	Item		
	Inspection of the site (B3.3) F:..... V:..... T:.....	Item		
	Existing premises occupied (B3.4) F:..... V:..... T:.....	Item		
	Specific requirements:  The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.			
	<b>Carried Forward</b>		R	
	P's and G's  <b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Previous work - dimensional accuracy (B3.5) F:..... V:..... T:.....	Item		
	Previous work - defects (B3.6) F:..... V:..... T:.....	Item		
	Services - known (B3.7) F:..... V:..... T:.....	Item		
	Services - unknown (B3.8) F:..... V:..... T:.....	Item		
	Protection of trees etc. (B3.9) F:..... V:..... T:.....	Item		
	Articles of value (B3.10) F:..... V:..... T:.....	Item		
	Inspection of adjoining properties etc. (B3.11) F:..... V:..... T:.....	Item		
	<b><u>Management of contract (B4)</u></b>			
	Management of the works (B4.1) F:..... V:..... T:.....	Item		
	Programme for the works (B4.2)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:.....	Item		
	Progress meetings (B4.3)			
	F:..... V:..... T:.....	Item		
	Technical meetings (B4.4)			
	F:..... V:..... T:.....	Item		
	Labour and Plant records (B4.5)			
	F:..... V:..... T:.....	Item		
	<b><u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u></b>			
	Samples of materials (B5.1)			
	F:..... V:..... T:.....	Item		
	Workmanship samples (B5.2)			
	F:..... V:..... T:.....	Item		
	Shop drawings (B5.3)			
	F:..... V:..... T:.....	Item		
	Compliance with Manufacturer's Instructions (B5.4)			
	F:..... V:..... T:.....	Item		
	<b><u>Temporary works and plant (B6)</u></b>			
	Deposits and fees (B6.1)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:..... Enclosure of the works (B6.2)	Item		
	F:..... V:..... T:..... Advertising (B6.3)	Item		
	F:..... V:..... T:..... Plant, equipment, sheds and offices (B6.4)	Item		
	F:..... V:..... T:..... Main notice board (B6.5)	Item		
	F:..... V:..... T:..... Subcontractors' notice board (B6.6)	Item		
	<b><u>Temporary services (B7)</u></b>			
	Location (B7.1) F:..... V:..... T:.....	Item		
	Water (B7.2)  <b>Option [A] shall apply</b>			
	F:..... V:..... T:.....	Item		
	Electricity (B7.3) <b>Option [A] shall apply</b>			
	F:..... V:..... T:.....	Item		
	Telecommunication facilities (B7.4)			
	<b>Carried Forward</b>		R	
	P's and G's <b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:..... Ablution facilities (B7.5)	Item		
	<b>Option [A] shall apply</b>			
	F:..... V:..... T:.....	Item		
	<b><u>Prime cost amounts (B8)</u></b>			
	Responsibility for prime cost amounts (B8.1)			
	F:..... V:..... T:.....	Item		
	<b><u>Attendance on N/S Subcontractors (B9)</u></b>			
	General attendance (B9.1)			
	F:..... V:..... T:.....	Item		
	Special attendance (B9.2)			
	F:..... V:..... T:.....	Item		
	Commissioning - Fuel, water and power (B9.3)			
	F:..... V:..... T:.....	Item		
	<b><u>Financial aspects (B10)</u></b>			
	Statutory taxes, duties and levies (B10.1)			
	F:..... V:..... T:.....	Item		
	Payment of preliminaries (B10.2)			
	<b>Option [B] shall apply</b>			
	F:..... V:..... T:.....	Item		
	Adjustment of preliminaries (B10.3)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Option [A] shall apply</b>			
	F:..... V:..... T:..... Payment certificate cash flow (B10.4)	Item		
	F:..... V:..... T:.....	Item		
	<b><u>General (B11)</u></b>			
	Protection of works (B11.1) F:..... V:..... T:.....	Item		
	Protection/isolation of existing/sectionally occupied works (B11.2) F:..... V:..... T:.....	Item		
	Security of the Works (B11.3) F:..... V:..... T:.....	Item		
	Notice before covering work (B11.4) F:..... V:..... T:.....	Item		
	Disturbance (B11.5) F:..... V:..... T:.....	Item		
	Environmental Disturbance (B11.6) F:..... V:..... T:.....	Item		
	Works cleaning and clearing (B11.7) F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Vermin (B11.8) F:..... V:..... T:.....	Item		
	Overhand work (B11.9) F:..... V:..... T:.....	Item		
	Instruction manuals and guarantees (B11.10) F:..... V:..... T:.....	Item		
	As built information (B11.11) F:..... V:..... T:.....	Item		
	Tenant Installations (B11.12) F:..... V:..... T:.....	Item		
	<b><u>Schedule of variables (B12)</u></b>			
	Pre-tender information (B12.1) F:..... V:..... T:.....	Item		
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional:  <p style="text-align: right;">No</p>			
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete  <p style="text-align: right;">No</p>			
	12.1.3 Interest of agents (B2.4)			
	<b>Carried Forward</b>		R	
	P's and G's <b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	12.1.4 Defined works area (B3.1)			
	12.1.5 Geotechnical investigation (B3.2)			
	N/A			
	12.1.6 Existing premises occupied (B3.4)			
	12.1.7 Previous work - dimensional accuracy (B3.4)			
	12.1.8 Previous work - defects (B3.5)			
	12.1.9 Services - known (B3.7)			
	12.1.10 Protection of trees (B3.9)			
	All trees should be protected and only on instruction of the Principal Agent may any trees be removed			
	12.1.11 Inspection of adjoining properties (B3.11)			
	12.1.12 Enclosure of the works (B6.2)			
	12.1.13 Offices (B6.4.3)			
	Specific requirements:  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, suitably 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.			
	12.1.14 Main notice board (B6.5)			
	YES			
	12.1.15 Subcontractors notice board (B6.6) A notice board is required			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Yes			
	12.1.16 Water (B7.2) Alternative Selected: A			
	12.1.17 Electricity (B7.3) Alternative selected: A			
	12.1.18 Telecommunications (B7.4)			
	12.1.19 Ablution facilities (B7.5) Alternative selected: A			
	12.1.20 Protection of existing/sectionally occupied works (B11.2)			
	12.1.21 Special attendance (B9.2)			
	Subcontractor (1) details: N/A			
	12.1.22 Protection of the works (B11.1)			
	N/A			
	12.1.23 Disturbance (B11.5)			
	N/A			
	12.1.24 Environmental Disturbance (B11.6)			
	N/A			
	<b><u>Post tender information (B12.2)</u></b>			
	12.2.1 Payment of preliminaries Alternative selected: B			
	12.2.2 Adjustment of preliminaries Alternative selected: A			
	12.2.3 Additional agreed preliminaries items N/A			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			



Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative</p> <p>Contract instructions</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor</p> <p>Labour record</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week</p> <p>Plant record</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week</p> <p>Guarantees</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement</p> <p>Overtime</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</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 execution thereof, that costs for such overtime are to be borne by the employer</p> <p>Co-operation of contractor for cost management</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors</p> <p>Occupational Health and Safety Specification</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)</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 / lump sum document.</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>	Item		
	<b>Carried Forward</b>			R
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause, as well as the clauses that follow hereafter and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under these clauses and no additional claims in this regard shall be entertained.</p> <p>The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines. It is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under this clause and the specific related clauses hereafter and no additional claims in this regard shall be entertained.</p> <p>Occupational Health and Safety Specification</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines</p> <p>Occupational Health and Safety Specification</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc</p> <p>Occupational Health and Safety Specification</p> <p style="padding-left: 40px;">F:..... V:..... T:.....</p> <p>Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc.</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of reflective vests			
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of hard hats			
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of protective footwear			
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of earplugs			
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of dust masks			
	Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item		
	Provision of gloves			
	Provision of personal protective equipment (PPE)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:.....	Item		
	Provision of high visibility overalls to SARTSM Chapter 13 Level 3			
	Provision of personal protective equipment (PPE)			
	F:..... V:..... T:.....	Item		
	Provision of SANS approved ear defenders			
	Provision of personal protective equipment (PPE)			
	F:..... V:..... T:.....	Item		
	Provision of face masks (Covid -19)			
	Provision of personal protective equipment (PPE)			
	F:..... V:..... T:.....	Item		
	Provision of face shields (Covid-19)			
	Provision of personal protective equipment (PPE)			
	F:..... V:..... T:.....	Item		
	Provision of gloves (Covid-19)			
	Provision of personal protective equipment (PPE)			
	F:..... V:..... T:.....	Item		
	Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid-19)			
	Provision of personal protective equipment (PPE)			
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	F:..... V:..... T:.....  Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)  Provision of personal protective equipment (PPE)  F:..... V:..... T:.....	Item		
	Provision of digital infra red non-contact body thermometer (Covid-19, minimum of two per site entrance)  Provision of personal protective equipment (PPE)  F:..... V:..... T:.....	Item		
	Provision of perspex screens for office staff (Covid-19, minimum size 600 x 500mm)  Provision of personal protective equipment (PPE)  F:..... V:..... T:.....	Item		
	Provision of signage, including Covid-19 related signage  Provision of personal protective equipment (PPE)  F:..... V:..... T:.....	Item		
	Provision of full time construction health and safety officer (SACPCMP Registered)  Provision of personal protective equipment (PPE)  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	P's and G's			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations</p> <p>Provision of personal protective equipment (PPE)</p> <p>F:..... V:..... T:.....</p> <p>Medical screenings, examinations, etc. in terms of Covid 19 regulations</p> <p>Provision of personal protective equipment (PPE)</p> <p>F:..... V:..... T:.....</p> <p>Induction training, including Covid-19 training</p> <p>Provision of personal protective equipment (PPE)</p> <p>F:..... V:..... T:.....</p> <p>Provision of first aid boxes to GSR requirements</p> <p>Provision of personal protective equipment (PPE)</p> <p>F:..... V:..... T:.....</p> <p>Noise monitoring including establishment of noise zones (plant), audio grams (personnel), etc.</p> <p>F:..... V:..... T:.....</p> <p>Submission of health and safety file</p> <p>HIV/AIDS Awareness</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<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 items C11.1 to C11.5 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 31.0 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><b><u>SUMMARY OF CATEGORIES</u></b></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p>			
	<b>Carried to Summary</b>		R	
	<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Item No		Quantity	Rate	Amount
	<p><b><u>DEMOLITIONS AND ALTERATIONS</u></b></p> <p><b><u>SECTION NO.2</u></b></p> <p><b><u>BILL NO.1</u></b></p> <p><b><u>ALTERATIONS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>View site</u></p> <p>Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained.</p> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition.</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 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.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Alterations</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent.</p> <p>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before re-fixing including taking off, easing and re-hanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, 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.</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc.</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing.</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><b><u>DEMOLITIONS AND ALTERATIONS</u></b></p> <p><b><u>DEMOLITIONS OF EXISTING TOILET STRUCTURES</u></b></p> <p>1 Allow an amount of R30 000 for demolitions</p> <p>2 Demolish existing pit toilet structures including hacking up and removing foundations and surface beds, doors, windows and door frames, ironmongery and plumbing fittings complete. All pits are to be filled with soil</p> <p style="text-align: right;">No</p> <p style="text-align: center;"><b>Carried Forward</b></p> <p>Alterations</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>	Item		
			R	

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
3	Demolish existing ground slab (max strength and size, 25MPa and 10m2 respectively) with mesh reinforcement for pit toilets that have been abandoned. All pits are to be filled with soil.	No		
	<b>Carried to Summary</b>		R	
	Alterations			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO.3</u></b></p> <p><b><u>BILL NO.1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Nature of ground</p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p>Nature of ground</p> <p>A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured</p> <p>Carting away of excavated material</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</p> <p>Filling</p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p style="text-align: right;">Carried Forward</p> <p>F6 + D - enviroloo</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Soil poisoning</b>			
	<b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b>			
	<b><u>SITE CLEARANCE ETC</u></b>			
	<b>Site clearance</b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	110	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	110	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<b>Excavation in earth not exceeding 2m deep</b>			
3	Trenches	m3	10	
4	Pits	m3	15	
5	Thickening under aprons	m3	10	
	<b>Extra over trench and hole excavations in earth for excavation in</b>			
6	Soft rock	m3	5	
7	Hard rock	m3	5	
	<b>Extra over all excavations for carting away</b>			
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	15	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Risk of collapse of excavations</b>			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	85	
	<b>Keeping excavations free of water</b>			
10	Keeping excavations free of all water other than subterranean water		Item	
	<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
11	Under floors, steps, paving, etc	m3	9	
12	Backfilling to trenches, holes, etc	m3	6	
	<b>Compaction of surfaces</b>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	35	
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Enviro Loo Tanks Pit)	m2	15	
15	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	40	
	<b>Prescribed density tests on filling</b>			
16	Modified AASHTO Density	No	7	
	<b><u>SOIL POISONING</u></b>			
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Weedkiller mixed in accordance to supplier's specifications</b>			
17	To bottoms and sides of trenches, etc.	m2	125	
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	15	
19	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	70	
	<b>Soil insecticide</b>			
20	To bottoms and sides of trenches etc	m2	125	
21	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	15	
22	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	70	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>UNREINFORCED CONCRETE, ETC.</b>			
	<b>15MPa/19mm concrete</b>			
23	Surface blinding under footings and bases	m3	1	
24	Aprons cast in panels to falls	m3	5	
25	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc.	m	5	
	<b>25MPa/19mm concrete</b>			
26	Strip footings	m3	5	
27	Ramps	m3	2	
	<b><u>REINFORCED CONCRETE</u></b>			
	<b>25MPa/19mm concrete</b>			
28	Surface beds in pits	m3	2	
29	Extra over for thickening in pits for thickening size approximately 150mm deep, 500mm at top and tapering to 400mm at bottom, incl. all excavations, cart away, etc.	m	10	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>30Mpa/19mm concrete</b>			
30	Surface beds cast in panels on waterproofing.	m3	5	
31	Slabs (pits)	m3	10	
	<b>TEST CUBES</b>			
32	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
33	Surface beds, slabs, etc	m2	30	
34	Surface beds, slabs, etc (pits)	m2	20	
35	Aprons to falls	m2	40	
	<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>			
	<b>Smooth formwork to sides</b>			
36	Edges, risers, ends and reveals exceeding 300mm high or wide	m	20	
	<b>Permanent formwork to soffits</b>			
37	Slabs propped up not exceeding 1,5m high	m2	15	
38	Form 500mm radius opening in floor slab	No	7	
	<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
	<b>Mild steel reinforcement to structural concrete work</b>			
39	8mm Diameter bars	t	0.50	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
40	10mm Diameter bars	t	0.50	
	<b>Fabric Reinforcement</b>			
41	Mesh ref. No. 395 fabric reinforcement fixed horizontally in surface beds etc.	m2	35	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b>BRICKWORK</b>			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<b><u>FOUNDATIONS (PROVISIONAL)</u></b>			
	Brickwork of NFP bricks in class II mortar			
42	One brick walls	m2	15	
43	One brick walls in pits	m2	40	
	<b>FACE BRICKWORK</b>			
44	Extra over brickwork for face brickwork	m2	15	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>SUPERSTRUCTURE</b>			
	<b>Brickwork of NFP bricks in class II mortar</b>			
45	Half brick walls	m2	40	
46	Half brick walls in beamfilling	m2	10	
47	One brick walls	m2	120	
	<b>FACE BRICKWORK</b>			
48	Extra over brickwork for face brickwork	m2	120	
49	Extra over brickwork for brick-on-edge header course lintel	m	10	
50	110mm Wide sill set level and slightly projecting	m		
51	220mm Wide sill set sloping and slightly protecting outside	m	10	
52	Fair cutting fitting around pipe not exceeding 100mm	No	10	
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10	
	<b>BRICKWORK SUNDRIES</b>			
	<b>Brickwork reinforcement</b>			
54	75mm Wide reinforcement built in horizontally	m	80	
55	150mm Wide reinforcement built in horizontally	m	280	
	<b>Galvanised wire ties etc</b>			
56	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	30	
	<b>Turning pieces to lintels etc.</b>			
57	115mm Wide turning pieces	m	10	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
58	230mm Wide turning pieces	m	10	
	<b>Prestressed fabricated lintels</b>			
59	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	20	
	<b>Air bricks etc.</b>			
60	230 x 152mm terra-cotta vermin proofed louvered air brick	No	80	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
61	In walls	m2	65	
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
62	Under surface beds	m2	40	
63	Under aprons and ramps	m2	45	
	<b>FLOOR AND WALL SEALERS</b>			
	Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
64	Around steel windows and door frames	m	10	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
65	Roof covering with pitch not exceeding 25 degrees	m2	45	
	<b>ROOF AND WALL INSULATION</b>			
66	12" Thermal resistance sisalation laid on purlins	m2	35	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>ROOFS, ETC.</u></b>			
	<b>Sawn softwood grade 6</b>			
67	76 x 38mm Wall plates	m	40	
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
69	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
	<b>Sundries</b>			
70	Two coats creosote on sawn timbers	m2	80	
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	20	
72	Hurricane clips	No	20	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<b>Pressed fibre-cement:</b>			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	30	
	<b><u>DOORS, ETC</u></b>			
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Wrought meranti doors hung to steel frames</b>			
74	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No 2		
75	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No 6		
76	44mm framed, ledged and braced door 915 x 2032mm high including external weather bar (disabled)	No 1		
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>IRONMONGERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>HINGES, BOLTS, ETC</u></b>			
	100mm Chrome plated "D" type handle 3 by solid brace hinges			
	<b>CATCHES,CABIN HOOKS, ETC</b>			
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	6	
	<b><u>LOCKS</u></b>			
	<b>Approved</b>			
78	Three lever mortice lock set	No	3	
79	Indicator lock set	No	6	
80	Security double throw dead lock (no latch)	No	3	
	<b><u>HANDLES, ETC.</u></b>			
	<b>Aluminium Pull Handle</b>			
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.		Item	
	<b><u>SUNDRIES</u></b>			
	<b>ASSA ABLOY</b>			
82	38mm Diameter rubber door stop plugged	No	3	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Vaal Paragon</b>			
83	32mm Type 9 back grab rail 800mm long plugged	No	1	
84	32mm Type 8 side grab rail 900mm girth plugged	No	1	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	<b>Dorma:</b>			
85	DSS-130 Engraved "Female" information sign, plugged	No	1	
86	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
	<b><u>BATHROOM FITTINGS</u></b>			
	<b>Sundries</b>			
	<b>Kimberley-Clark or Similar</b>			
87	SQ2 code 405607B white none lockable toilet roll holder	No	7	
	<b>stainless Steel</b>			
88	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	1	
89	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	1	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b><u>METALWORK</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<b>Gates to external doors</b>			
90	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
91	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	1	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<b>1,2mm Double rebated frames suitable for half brick walls</b>			
92	Frame for door size 813 x 2032mm high	No	6	
	<b>1,2mm Double rebated frames suitable for one brick walls</b>			
93	Frame for door size 813 x 2032mm high	No	2	
94	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
95	Window type NE1, size 533 x 654mm high	No	7	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
96	Window type NE7, size 1022 x 654mm high	No 3		
	<b>Sundries</b>			
	<b>Cage, etc</b>			
97	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No 1		
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLASTERING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>GRANOLITHIC</u></b>			
	<b>Untinted granolithic on concrete</b>			
98	20mm Thick on floors	m2	40	
	<b>INTERNAL PLASTER</b>			
	<b>Cement plaster on brickwork or blockwork</b>			
99	On internal plastered walls(pits)	m2	35	
	<b><u>FLOOR AND WALLS SEALERS</u></b>			
	<b>Minimum two coats approved epoxy coat:</b>			
100	On floors in pits	m2	9	
101	On internal plastered walls in pits	m2	35	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
	<b>RAINWATER DISPOSAL</b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b>Aluminium Zinc Seamless Gutters</b>			
102	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	30	
103	Extra over eaves gutter for stopped end	No	4	
104	75 x 100mm Diameter rainwater down pipes fixed to wall	m	15	
105	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
106	Ditto .for shoe	No	4	
	<b><u>SANITARY FITTINGS</u></b>			
	<b>"Vaal" or similar and approved</b>			
107	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required for disable toilets.	No	1	
	<b>SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS</b>			
108	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	7	
109	Enviroloo two (3) Pan Urinal system complete (ABS) (FG-URI3PA/B3)	No		
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
110	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	1	
	<b>Rainwater tank, etc.</b>			
111	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	2	
	<b><u>SOIL DRAINAGE</u></b>			
	<b>uPVC pipes</b>			
112	110mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
	<b>Extra over uPVC pipes for fittings</b>			
113	110mm Bend	No	10	
114	110mm Junction	No	10	
	<b>uPVC gulleys</b>			
115	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete sorround etc.	No	10	
	<b>TRAPS ETC</b>			
	<b>Marley</b>			
116	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1	
	<b>TAPS, VALVES, ETC</b>			
117	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	1	
	<b>Carried Forward</b>			R
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
118	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	1	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
119	50mm Pipes	m	60	
	<b>Extra over uPVC pipes for fittings</b>			
120	50mm Bend	No	10	
121	50mm Access bend	No	10	
122	50mm Junction	No	10	
	<b>WATER SUPPLIES</b>			
	<b>Class 0 copper pipes</b>			
123	15mm Pipes	m	5	
124	22mm Pipes	m	5	
	<b>Extra over class 0 copper pipes for capillary fittings</b>			
125	15mm Fittings	No	10	
126	22mm Pipes	No	10	
	<b>TESTING</b>			
127	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.		Item	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>GLAZING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>GLAZING TO STEEL WITH PUTTY</b>			
	<b>6,38mm Obscure safety glass</b>			
128	Panes not exceeding 0,1 m2	m2	4	
	<b>Carried Forward</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b>PAINTWORK ETC TO NEW WORK</b></p> <p><b>PREPARATORY WORK TO EXISTING WORK</b></p> <p>Previously painted plastered surfaces</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>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</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>ON FIBRE-CEMENT</u></b></p> <p>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</p>			
129	On fascias and barge boards	m2	10	
	<p><b>ON METAL</b></p> <p style="text-align: center;"><b>Carried Forward</b></p> <p>F6 + D - enviroloo</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>		R	

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</b>			
130	On door frames	m2	5	
	<b>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</b>			
131	On windows with burglar bars	m2	5	
	<b>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</b>			
132	On gates (Measured over the full flat area of both sides)	m2	5	
	<b>ON WOOD</b>			
	<b>Under coat and minimum 2 coats gloss enamel, colour TBC</b>			
133	On doors (External)	m2	10	
134	On doors (Internal)	m2	7	
	<b>BUILDING</b>			
	<b>FINAL SUMMARY</b>			
	<b>Carried to Summary</b>		R	
	F6 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		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>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Nature of ground</p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p>Nature of ground</p> <p>A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured</p> <p>Carting away of excavated material</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</p> <p>Filling</p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p style="text-align: right;">Carried Forward</p> <p>S7 + D - enviroloo</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Soil poisoning</b>			
	<b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b>			
	<b><u>SITE CLEARANCE ETC</u></b>			
	<b>Site clearance</b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	140	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	140	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<b>Excavation in earth not exceeding 2m deep</b>			
3	Trenches	m3	25	
4	Pits	m3	15	
5	Thickening under aprons	m3	30	
	<b>Extra over trench and hole excavations in earth for excavation in</b>			
6	Soft rock	m3	5	
7	Hard rock	m3	5	
	<b>Extra over all excavations for carting away</b>			
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	20	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Risk of collapse of excavations</b>			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	100	
	<b>Keeping excavations free of water</b>			
10	Keeping excavations free of all water other than subterranean water		Item	
	<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
11	Under floors, steps, paving, etc	m3	5	
12	Backfilling to trenches, holes, etc	m3	10	
	<b>Compaction of surfaces</b>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	45	
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Enviro Loo Tanks Pit)	m2	15	
15	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	45	
	<b>Prescribed density tests on filling</b>			
16	Modified AASHTO Density	No	7	
	<b><u>SOIL POISONING</u></b>			
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Weedkiller mixed in accordance to supplier's specifications</b>			
17	To bottoms and sides of trenches, etc.	m2	145	
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	20	
19	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	85	
	<b>Soil insecticide</b>			
20	To bottoms and sides of trenches etc	m2	145	
21	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	20	
22	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	85	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>UNREINFORCED CONCRETE, ETC.</u></b>			
	<b>15MPa/19mm concrete</b>			
23	Surface blinding under footings and bases	m3	5	
24	Aprons cast in panels to falls	m3	20	
25	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc.	m	35	
	<b>25MPa/19mm concrete</b>			
26	Strip footings	m3	10	
27	Ramps	m3	5	
	<b><u>REINFORCED CONCRETE</u></b>			
	<b>25MPa/19mm concrete</b>			
28	Surface beds in pits	m3	5	
29	Extra over for thickening in pits for thickening size approximately 150mm deep, 500mm at top and tapering to 400mm at bottom, incl. all excavations, cart away, etc.	m	20	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>30Mpa/19mm concrete</b>			
30	Surface beds cast in panels on waterproofing.	m3	5	
31	Slabs (pits)	m3	5	
	<b>TEST CUBES</b>			
32	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
33	Surface beds, slabs, etc	m2	50	
34	Surface beds, slabs, etc (pits)	m2	20	
35	Aprons to falls	m2	45	
	<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
	<b>Smooth formwork to sides</b>			
36	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	40	
	<b>Permanent formwork to soffits</b>			
37	Slabs propped up not exceeding 1,5m high	m2	15	
38	Form 500mm radius opening in floor slab	No	7	
	<b>REINFORCEMENT (PROVISIONAL)</b>			
	<b>Mild steel reinforcement to structural concrete work</b>			
39	8mm Diameter bars	t	0.50	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
40	10mm Diameter bars	t	0.50	
	<b>Fabric Reinforcement</b>			
41	Mesh ref. No. 395 fabric reinforcement fixed horizontally in surface beds etc.	m2	50	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b>BRICKWORK</b>			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<b><u>FOUNDATIONS (PROVISIONAL)</u></b>			
	Brickwork of NFP bricks in class II mortar			
42	One brick walls	m2	15	
43	One brick walls in pits	m2	30	
	<b>FACE BRICKWORK</b>			
44	Extra over brickwork for face brickwork	m2	15	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SUPERSTRUCTURE</u></b>			
	<b>Brickwork of NFP bricks in class II mortar</b>			
45	Half brick walls	m2	50	
46	Half brick walls in beamfilling	m2	10	
47	One brick walls	m2	140	
	<b>FACE BRICKWORK</b>			
48	Extra over brickwork for face brickwork	m2	140	
49	Extra over brickwork for brick-on-edge header course lintel	m	15	
50	110mm Wide sill set level and slightly projecting	m	17	
51	220mm Wide sill set sloping and slightly protecting outside	m	15	
52	Fair cutting fitting around pipe not exceeding 100mm	No	15	
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No		
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<b>Brickwork reinforcement</b>			
54	75mm Wide reinforcement built in horizontally	m	100	
55	150mm Wide reinforcement built in horizontally	m	300	
	<b>Galvanised wire ties etc</b>			
56	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	30	
	<b>Turning pieces to lintels etc.</b>			
57	115mm Wide turning pieces	m	10	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
58	230mm Wide turning pieces	m	15	
	<b>Prestressed fabricated lintels</b>			
59	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	20	
	<b>Air bricks etc.</b>			
60	230 x 152mm terra-cotta vermin proofed louvered air brick	No	70	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
61	In walls	m2	50	
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
62	Under surface beds	m2	40	
63	Under aprons and ramps	m2	80	
	<b>FLOOR AND WALL SEALERS</b>			
	Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
64	Around steel windows and door frames	m	15	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
65	Roof covering with pitch not exceeding 25 degrees	m2	50	
	<b>ROOF AND WALL INSULATION</b>			
66	12" Thermal resistance sisalation laid on purlins	m2	50	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>ROOFS, ETC.</u></b>			
	<b>Sawn softwood grade 6</b>			
67	76 x 38mm Wall plates	m	25	
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
69	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
	<b>Sundries</b>			
70	Two coats creosote on sawn timbers	m2	30	
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	20	
72	Hurricane clips	No	40	
	<b>EAVES, VERGES, ETC</b>			
	<b>Pressed fibre-cement:</b>			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	35	
	<b>DOORS, ETC</b>			
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Wrought meranti doors hung to steel frames</b>			
74	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No 2		
75	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No 7		
76	44mm framed, ledged and braced door 915 x 2032mm high including external weather bar (disabled)	No 1		
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>IRONMONGERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>HINGES, BOLTS, ETC</u></b>			
	100mm Chrome plated "D" type handle 3 by solid brace hinges			
	<b>CATCHES,CABIN HOOKS, ETC</b>			
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	7	
	<b><u>LOCKS</u></b>			
	<b>Approved</b>			
78	Three lever mortice lock set	No	3	
79	Indicator lock set	No	13	
80	Security double throw dead lock (no latch)	No	3	
	<b><u>HANDLES, ETC.</u></b>			
	<b>Aluminium Pull Handle</b>			
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.		Item	
	<b>SUNDRIES</b>			
	<b>ASSA ABLOY</b>			
82	38mm Diameter rubber door stop plugged	No	3	
	<b>Carried Forward</b>			R
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Vaal Paragon</b>			
83	32mm Type 9 back grab rail 800mm long plugged	No	1	
84	32mm Type 8 side grab rail 900mm girth plugged	No	1	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	<b>Dorma:</b>			
85	DSS-130 Engraved "Male" information sign, plugged	No	1	
86	DSS-133 Engraved "Female" information sign, plugged	No	1	
87	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
	<b><u>BATHROOM FITTINGS</u></b>			
	<b>Sundries</b>			
	<b>Kimberley-Clark or Similar</b>			
88	SQ2 code 405607B white none lockable toilet roll holder	No	7	
	<b>Stainless Steel</b>			
89	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No		
90	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	1	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b><u>METALWORK</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<b>Gates to external doors</b>			
91	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
92	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	1	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<b>1,2mm Double rebated frames suitable for half brick walls</b>			
93	Frame for door size 813 x 2032mm high	No	7	
	<b>1,2mm Double rebated frames suitable for one brick walls</b>			
94	Frame for door size 813 x 2032mm high	No	2	
95	Frame for door size 914 x 2032mm high	No	1	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
96	Window type NE1, size 533 x 654mm high	No	10	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
97	Window type NE7, size 1022 x 654mm high	No 5		
	<b>Sundries</b>			
	<b>Cage, etc</b>			
98	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No 1		
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLASTERING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>GRANOLITHIC</u></b>			
	<b>Untinted granolithic on concrete</b>			
99	20mm Thick on floors	m2	45	
	<b>INTERNAL PLASTER</b>			
	<b>Cement plaster on brickwork or blockwork</b>			
100	On internal plastered walls(pits)	m2	35	
	<b>FLOOR AND WALLS SEALERS</b>			
	<b>Minimum two coats approved epoxy coat:</b>			
101	On floors in pits	m2	10	
102	On internal plastered walls in pits	m2	35	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
	<b>RAINWATER DISPOSAL</b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b>Aluminium Zinc Seamless Gutters</b>			
103	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	35	
104	Extra over eaves gutter for stopped end	No	4	
105	75 x 100mm Diameter rainwater down pipes fixed to wall	m	20	
106	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
107	Ditto .for shoe	No	4	
	<b>SANITARY FITTINGS</b>			
	<b>"Vaal" or similar and approved</b>			
108	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required for disable toilets.	No	1	
	<b>SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS</b>			
109	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	8	
110	Enviroloo two (3) Pan Urinal system complete (ABS) (FG-URI3PA/B3)	No	1	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
111	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2	
	<b>Rainwater tank, etc.</b>			
112	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1	
	<b>SOIL DRAINAGE</b>			
	<b>uPVC pipes</b>			
113	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30	
	<b>Extra over uPVC pipes for fittings</b>			
114	110mm Bend	No	5	
115	110mm Junction	No	5	
	<b>uPVC gulleys</b>			
116	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	2	
	<b>TRAPS ETC</b>			
	<b>Marley</b>			
117	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1	
	<b>TAPS, VALVES, ETC</b>			
118	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	1	
	<b>Carried Forward</b>			R
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
119	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	1	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
120	50mm Pipes	m	60	
	<b>Extra over uPVC pipes for fittings</b>			
121	50mm Bend	No	5	
122	50mm Access bend	No	5	
123	50mm Junction	No	5	
	<b>WATER SUPPLIES</b>			
	<b>Class 0 copper pipes</b>			
124	15mm Pipes	m	5	
125	22mm Pipes	m	5	
	<b>Extra over class 0 copper pipes for capillary fittings</b>			
126	15mm Fittings	No	2	
127	22mm Pipes	No	2	
	<b>TESTING</b>			
128	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.		Item	
	<b>Carried Forward</b>			
	S7 + D - enviroloo			R
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>GLAZING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<b>6,38mm Obscure safety glass</b>			
129	Panes not exceeding 0,1 m2	m2	7	
	<b>Carried Forward</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 13</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b><u>PAINTWORK ETC TO NEW WORK</u></b></p> <p><b>PREPARATORY WORK TO EXISTING WORK</b></p> <p><b>Previously painted plastered surfaces</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>Previously painted metal surfaces</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>Previously painted wood surfaces</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>ON FIBRE-CEMENT</b></p> <p>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</p>			
130	On fascias and barge boards	m2	20	
	<p><b>ON METAL</b></p> <p style="text-align: center;"><b>Carried Forward</b></p> <p>S7 + D - enviroloo</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>		R	

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</b>			
131	On door frames	m2	5	
	<b>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</b>			
132	On windows with burglar bars	m2	5	
	<b>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</b>			
133	On gates (Measured over the full flat area of both sides)	m2	10	
	<b>ON WOOD</b>			
	<b>Under coat and minimum 2 coats gloss enamel, colour TBC</b>			
134	On doors (External)	m2	10	
135	On doors (Internal)	m2	10	
	<b>BUILDING</b>			
	<b>FINAL SUMMARY</b>			
	<b>Carried to Summary</b>		R	
	S7 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Nature of ground</p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p>Nature of ground</p> <p>A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured</p> <p>Carting away of excavated material</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</p> <p>Filling</p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p style="text-align: right;">Carried Forward</p> <p>M2 + D - enviroloo</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Soil poisoning</b>			
	<b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b>			
	<b><u>SITE CLEARANCE ETC</u></b>			
	<b>Site clearance</b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	95	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	95	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<b>Excavation in earth not exceeding 2m deep</b>			
3	Trenches	m3	15	
4	Pits	m3	5	
5	Thickening under aprons	m3	15	
	<b>Extra over trench and hole excavations in earth for excavation in</b>			
6	Soft rock	m3	5	
7	Hard rock	m3	5	
	<b>Extra over all excavations for carting away</b>			
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Risk of collapse of excavations</b>			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m	75	
	<b>Keeping excavations free of water</b>			
10	Keeping excavations free of all water other than subterranean water		Item	
	<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
11	Under floors, steps, paving, etc	m3	10	
12	Backfilling to trenches, holes, etc	m3	10	
	<b>Compaction of surfaces</b>			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	25	
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Enviro Loo Tanks Pit)	m2	5	
15	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	30	
	<b>Prescribed density tests on filling</b>			
16	Modified AASHTO Density	No	5	
	<b><u>SOIL POISONING</u></b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Weedkiller mixed in accordance to supplier's specifications</b>			
17	To bottoms and sides of trenches, etc.	m2	70	
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	25	
19	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	60	
	<b>Soil insecticide</b>			
20	To bottoms and sides of trenches etc	m2	70	
21	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	25	
22	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	60	
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>UNREINFORCED CONCRETE, ETC.</u></b>			
	<b>15MPa/19mm concrete</b>			
23	Surface blinding under footings and bases	m3	1	
24	Aprons cast in panels to falls	m3	15	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
25	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc.	m	30	
	<b>25MPa/19mm concrete</b>			
26	Strip footings	m3	10	
27	Ramps	m3	5	
	<b><u>REINFORCED CONCRETE</u></b>			
	<b>25MPa/19mm concrete</b>			
28	Surface beds in pits	m3	1	
29	Extra over for thickening in pits for thickening size approximately 150mm deep, 500mm at top and tapering to 400mm at bottom, incl. all excavations, cart away, etc.	m	5	
	<b>30Mpa/19mm concrete</b>			
30	Surface beds cast in panels on waterproofing.	m3	1	
31	Slabs (pits)	m3	1	
	<b>TEST CUBES</b>			
32	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0	
	<b>Section No. 2 BUILDING Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT</b>			
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
33	Surface beds, slabs, etc	m2	25	
34	Surface beds, slabs, etc (pits)	m2	5	
35	Aprons to falls	m2	35	
	<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>			
	<b>Smooth formwork to sides</b>			
36	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	30	
	<b>Permanent formwork to soffits</b>			
37	Slabs propped up not exceeding 1,5m high	m2	10	
38	Form 500mm radius opening in floor slab	No	5	
	<b>REINFORCEMENT (PROVISIONAL)</b>			
	<b>Mild steel reinforcement to structural concrete work</b>			
39	8mm Diameter bars	t	0.40	
40	10mm Diameter bars	t	0.40	
	<b>Fabric Reinforcement</b>			
41	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	35	
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b>MASONRY</b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b>BRICKWORK</b>			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<b><u>FOUNDATIONS (PROVISIONAL)</u></b>			
	<b>Brickwork of NFP bricks in class II mortar</b>			
42	One brick walls	m2	20	
43	One brick walls in pits	m2	15	
	<b>FACE BRICKWORK</b>			
44	Extra over brickwork for face brickwork	m2	20	
	<b><u>SUPERSTRUCTURE</u></b>			
	<b>Brickwork of NFP bricks in class II mortar</b>			
45	Half brick walls	m2	20	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
46	Half brick walls in beamfilling	m2	10	
47	One brick walls	m2	100	
	<b>FACE BRICKWORK</b>			
48	Extra over brickwork for face brickwork	m2	100	
49	Extra over brickwork for brick-on-edge header course lintel	m	10	
50	110mm Wide sill set level and slightly projecting	m		
51	220mm Wide sill set sloping and slightly protecting outside	m	10	
52	Fair cutting fitting around pipe not exceeding 100mm	No	6	
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No		
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<b>Brickwork reinforcement</b>			
54	75mm Wide reinforcement built in horizontally	m	50	
55	150mm Wide reinforcement built in horizontally	m	250	
	<b>Galvanised wire ties etc</b>			
56	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	25	
	<b>Turning pieces to lintels etc.</b>			
57	115mm Wide turning pieces	m	5	
58	230mm Wide turning pieces	m	10	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Prestressed fabricated lintels</b>			
59	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15	
	<b>Air bricks etc.</b>			
60	230 x 152mm terra-cotta vermin proofed louvered air brick	No	50	
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>DAMP-PROOFING OF WALLS AND FLOORS</b>			
	<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>			
61	In walls	m2	10	
	<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>			
62	Under surface beds	m2	25	
63	Under aprons and ramps	m2	35	
	<b>FLOOR AND WALL SEALERS</b>			
	<b>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</b>			
64	Around steel windows and door frames	m	10	
	<b><u>SECTION NO.5</u></b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
65	Roof covering with pitch not exceeding 25 degrees	m2	40	
	<b>ROOF AND WALL INSULATION</b>			
66	12" Thermal resistance sisalation laid on purlins	m2	40	
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>ROOFS, ETC.</b>			
	<b>Sawn softwood grade 6</b>			
67	76 x 38mm Wall plates	m	35	
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
69	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	60	
	<b>Sundries</b>			
70	Two coats creosote on sawn timbers	m2	10	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	30	
72	Hurricane clips	No	30	
	<b>EAVES, VERGES, ETC</b>			
	<b>Pressed fibre-cement:</b>			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	35	
	<b>DOORS, ETC</b>			
	<b>Wrought meranti doors hung to steel frames</b>			
74	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	1	
75	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	2	
76	44mm framed, ledged and braced door 915 x 2032mm high including external weather bar (disabled)	No	1	
	<b><u>SECTION NO. 1</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b>HINGES, BOLTS, ETC</b>			
	<b>100mm Chrome plated "D" type handle 3 by solid brace hinges</b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>CATCHES,CABIN HOOKS, ETC</b>			
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<b>LOCKS</b>			
	<b>Approved</b>			
78	Three lever mortice lock set	No	2	
79	Indicator lock set	No	2	
80	Security double throw dead lock (no latch)	No	2	
	<b>HANDLES, ETC.</b>			
	<b>Aluminium Pull Handle</b>			
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.		Item	
	<b>SUNDRIES</b>			
	<b>ASSA ABLOY</b>			
82	38mm Diameter rubber door stop plugged	No	2	
	<b>Vaal Paragon</b>			
83	32mm Type 9 back grab rail 800mm long plugged	No	1	
	<b>LETTERS, NAMEPLATES, ETC</b>			
	<b>Dorma:</b>			
84	DSS-130 Engraved "Male" information sign, plugged	No	1	
85	DSS-133 Engraved "Female" information sign, plugged	No	1	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>BATHROOM FITTINGS</u></b>			
	<b>Sundries</b>			
	<b>Kimberley-Clark or Similar</b>			
86	SQ2 code 405607B white none lockable toilet roll holder	No	3	
	<b>stainless Steel</b>			
87	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No		
88	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	1	
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b>METALWORK</b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b>WELDED SCREENS, GATES, ETC</b>			
	<b>Gates to external doors</b>			
89	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
90	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No		
	<b>PRESSED STEEL DOOR FRAMES</b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>1,2mm Double rebated frames suitable for half brick walls</b>			
91	Frame for door size 813 x 2032mm high	No	2	
	<b>1,2mm Double rebated frames suitable for one brick walls</b>			
92	Frame for door size 813 x 2032mm high	No	2	
93	Frame for door size 914 x 2032mm high	No	1	
	<b>STEEL WINDOWS, DOORS, ETC</b>			
	<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
94	Window type NE1, size 533 x 654mm high	No	6	
95	Window type NE7, size 1022 x 654mm high	No	3	
	<b>Sundries</b>			
	<b>Cage, etc</b>			
96	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No		
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLASTERING</u></b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b><u>GRANOLITHIC</u></b>			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Untinted granolithic on concrete</b>			
97	20mm Thick on floors	m2	30	
	<b>INTERNAL PLASTER</b>			
	<b>Cement plaster on brickwork or blockwork</b>			
98	On internal plastered walls(pits)	m2	5	
	<b>FLOOR AND WALLS SEALERS</b>			
	<b>Minimum two coats approved epoxy coat:</b>			
99	On floors in pits	m2	6	
100	On internal plastered walls in pits	m2	20	
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
	<b>RAINWATER DISPOSAL</b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b>Aluminium Zinc Seamless Gutters</b>			
101	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	15	
102	Extra over eaves gutter for stopped end	No	4	
103	75 x 100mm Diameter rainwater down pipes fixed to wall	m	30	
104	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
105	Ditto .for shoe	No	4	
	<b><u>SANITARY FITTINGS</u></b>			
	<b>"Vaal" or similar and approved</b>			
106	Ceramic wall mounted wash hand basin, complete with all fittings and accessories including cutting & making good wall & floor wherever required for disable toilets.	No	1	
	<b>SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS</b>			
107	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	3	
108	Enviroloo two (3) Pan Urinal system complete (ABS) (FG-URI3PA/B3)	No	3	
	<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
109	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	1	
	<b>Rainwater tank, etc.</b>			
110	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No		
	<b>SOIL DRAINAGE</b>			
	<b>uPVC pipes</b>			
111	110mm Pipes laid in and including trenches not exceeding 1m deep	m	70	
	<b>Extra over uPVC pipes for fittings</b>			
112	110mm Bend	No	10	
	<b>Carried Forward</b>			R
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
113	110mm Junction	No	10	
	<b>uPVC gulleys</b>			
114	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	10	
	<b>TRAPS ETC</b>			
	<b>Marley</b>			
115	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2	
	<b>TAPS, VALVES, ETC</b>			
116	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	2	
117	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2	
	<b>SANITARY PLUMBING</b>			
	<b>uPVC pipes</b>			
118	50mm Pipes	m	50	
	<b>Extra over uPVC pipes for fittings</b>			
119	50mm Bend	No	10	
120	50mm Access bend	No	10	
121	50mm Junction	No	10	
	<b>WATER SUPPLIES</b>			
	<b>Class 0 copper pipes</b>			
122	15mm Pipes	m	5	
	<b>Carried Forward</b>			R
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
123	22mm Pipes <span style="float: right;">m</span>	5		
	<b>Extra over class 0 copper pipes for capillary fittings</b>			
124	15mm Fittings <span style="float: right;">No</span>	5		
125	22mm Pipes <span style="float: right;">No</span>	5		
	<b>TESTING</b>			
126	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item		
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>GLAZING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>GLAZING TO STEEL WITH PUTTY</b>			
	<b>6,38mm Obscure safety glass</b>			
127	Panes not exceeding 0,1 m2 <span style="float: right;">m2</span>	4		
	Section No. 1 <b>BUILDING</b> Bill No. 11 <b>GLAZING</b>			
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>PAINTWORK</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>Carried Forward</b>		R	
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b>PREPARATORY WORK TO EXISTING WORK</b>			
	<b>Previously painted plastered surfaces</b>			
	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			
	<b>Previously painted metal surfaces</b>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<b>Previously painted wood surfaces</b>			
	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			
	<b>ON FIBRE-CEMENT</b>			
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint			
128	On fascias and barge boards	m2	10	
	<b>ON METAL</b>			
	Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.			
129	On door frames	m2	5	
	<b>Carried Forward</b>			
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</b>			
130	On windows with burglar bars	m2	5	
	<b>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</b>			
131	On gates (Measured over the full flat area of both sides)	m2	10	
	<b>Section No. 1 BUILDING Bill No. 12 PAINTWORK</b>			
	<b>ON WOOD</b>			
	<b>Under coat and minimum 2 coats gloss enamel, colour TBC</b>			
132	On doors (External)	m2	5	
133	On doors (Internal)	m2	10	
	<b>Section No. 1 BUILDING Bill No. 12 PAINTWORK</b>			
	<b>Carried to Summary</b>			R
	M2 + D - enviroloo			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		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>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Nature of ground</p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p>Nature of ground</p> <p>A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured</p> <p>Carting away of excavated material</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</p> <p>Filling</p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p style="text-align: right;">Carried Forward</p> <p>Gr 4 - Waterborne</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			R

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Soil poisoning</b>			
	<b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b>			
	<b><u>SITE CLEARANCE ETC</u></b>			
	<b>Site clearance</b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	105	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	105	
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<b>Excavation in earth not exceeding 2m deep</b>			
3	Trenches	m3	25	
4	Thickening under aprons	m3	20	
	<b>Extra over trench and hole excavations in earth for excavation in</b>			
5	Soft rock	m3	5	
6	Hard rock	m3	5	
	<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m	100	
	<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item	
	<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	15	
11	Backfilling to trenches, holes, etc	m3	5	
	<b>Compaction of surfaces</b>			
	<b>Under floors, steps, paving, etc.</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	30	
	<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	9	
	<b><u>SOIL POISONING</u></b>			
	<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	105	
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	40	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Soil insecticide</b>			
16	To bottoms and sides of trenches etc	m2	105	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	80	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>UNREINFORCED CONCRETE, ETC.</u></b>			
	<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2	
	<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	10	
	<b>REINFORCED CONCRETE</b>			
	<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	10	
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m		
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	3.0	
	<b>CONCRETE SUNDRIES</b>			
	<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	35	
	<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
	<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	20	
	<b><u>Section No. 2</u></b>			
	<b><u>BUILDING</u></b>			
	<b><u>Bill No. 3</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
	<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	0.50	
26	10mm Diameter bars	t	0.50	
	<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontally in surface beds etc.	m2	45	
	<b><u>SECTION NO. 1</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>BRICKWORK</u></b>			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<b><u>FOUNDATIONS (PROVISIONAL)</u></b>			
	Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	15	
29	Half brick walls	m2	5	
	<b>FACE BRICKWORK</b>			
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:			
30	Extra over brickwork for face brickwork	m2	15	
	<b>SUPERSTRUCTURE</b>			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	15	
32	Half brick walls	m2	35	
33	One brick walls	m2	150	
	<b>FACE BRICKWORK</b>			
	<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	150	
	<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	10	
36	110mm Wide sill set level and slightly projecting	m		
37	220mm Wide sill set sloping and slightly protecting outside	m	10	
38	Fair cutting fitting around pipe not exceeding 100mm	No	15	
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No		
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	65	
41	150mm Wide reinforcement built in horizontally	m	160	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	10	
	<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	5	
44	230mm Wide turning pieces	m	10	
	<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10	
	<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed loured air brick	No	30	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>			
47	In walls	m2	10	
	<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>			
48	Under surface beds	m2	15	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>FLOOR AND WALL SEALERS</u></b>			
	Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	10	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
50	Roof covering with pitch not exceeding 25 degrees	m2	35	
	<b><u>ROOF AND WALL INSULATION</u></b>			
51	12" Thermal resistance sisalition laid on purlins	m2	35	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>ROOFS, ETC.</u></b>			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	40	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	50	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m		
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	50	
	<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	30	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	40	
58	Hurricane clips	No	40	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	50	
	<b><u>DOORS, ETC</u></b>			
	<b>Wrought meranti doors hung to steel frames</b>			
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	2	
61	44mm framed, ledged and braced door 914 x 2032mm high including external weather bar	No	1	
62	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	3	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>IRONMONGERY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>HINGES, BOLTS, ETC</b>			
	100mm Chrome plated "D" type handle 3 by solid brace hinges			
	<b>CATCHES,CABIN HOOKS, ETC</b>			
63	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3	
	<b><u>LOCKS</u></b>			
	<b>Approved</b>			
64	Three lever mortice lock set	No	3	
65	Indicator lock set	No	3	
66	Security double throw dead lock (no latch)	No	3	
	<b><u>HANDLES, ETC.</u></b>			
	<b>Aluminium Pull Handle</b>			
67	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.		Item	
	<b><u>SUNDRIES</u></b>			
	<b>ASSA ABLOY</b>			
68	38mm Diameter rubber door stop plugged	No	3	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>Vaal Paragon</b>			
69	32mm Type 9 back grab rail 800mm long plugged	No	1	
70	32mm Type 8 side grab rail 900mm girth plugged	No	1	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	<b>Dorma:</b>			
71	DSS-130 Engraved "Male" information sign, plugged	No	1	
72	DSS-131 Engraved "Female" information sign, plugged	No	1	
73	DSS-132 Engraved "Male/Female" information sign, plugged	No		
74	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
	<b><u>BATHROOM FITTINGS</u></b>			
	<b>Sundries</b>			
	<b>Kimberley-Clark or Similar</b>			
75	SQ2 code 405607B white none lockable toilet roll holder	No	4	
	<b>stainless Steel</b>			
76	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No		
77	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No		
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b><u>METALWORK</u></b>			
	<b>Carried Forward</b>			R
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<b>Gates to external doors</b>			
78	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	4	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<b>1,2mm Double rebated frames suitable for half brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	3	
	<b>1,2mm Double rebated frames suitable for one brick walls</b>			
80	Frame for door size 813 x 2032mm high	No	3	
	<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
	<b>Nty steel or similar approved school windows with standard burlgar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
81	Window type NE1, size 533 x 654mm high	No	7	
82	Window type NE7, size 1022 x 654mm high	No	2	
	<b><u>Sundries</u></b>			
	<b>Cage, etc</b>			
83	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No		
	<b><u>SECTION NO.6</u></b>			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLASTERING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>GRANOLITHIC</u></b>			
	Untinted granolithic on concrete			
84	20mm Thick on floors	m2	45	
	<b><u>INTERNAL PLASTER</u></b>			
	Cement plaster on brickwork or blockwork			
85	On internal plastered walls	m2		
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
	<b>RAINWATER DISPOSAL</b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>Aluminium Zinc Seamless Gutters</b>			
86	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	50	
87	Extra over eaves gutter for stopped end	No	4	
88	75 x 100mm Diameter rainwater down pipes fixed to wall	m	20	
89	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
90	Ditto .for shoe	No 4		
	<b><u>SANITARY FITTINGS</u></b>			
	<b>"Vaal" or similar and approved</b>			
91	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No 3		
92	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No 3		
93	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No 1		
94	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No 2		
	<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
95	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No 1		
	<b>Rainwater tank, etc.</b>			
96	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No		
	<b><u>SOIL DRAINAGE</u></b>			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>uPVC pipes</b>			
97	110mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
	<b>Extra over uPVC pipes for fittings</b>			
98	110mm Bend	No	10	
99	110mm Junction	No	10	
	<b>uPVC gulleys</b>			
100	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	25	
	<b><u>WASTE UNIONS ETC</u></b>			
	<b>"Cobra Watertech"</b>			
101	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	5	
	<b>TRAPS ETC</b>			
	<b>"Cobra Watertech"</b>			
102	Cobra Ref. 365/40" CP bottle trap	No	5	
	<b>Marley</b>			
103	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1	
	<b>TAPS, VALVES, ETC</b>			
104	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	5	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
105	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	5	
	<b><u>SANITARY PLUMBING</u></b>			
	<b>uPVC pipes</b>			
106	50mm Pipes	m	50	
	<b>Extra over uPVC pipes for fittings</b>			
107	50mm Bend	No	15	
108	50mm Access bend	No	15	
109	50mm Junction	No	15	
	<b><u>WATER SUPPLIES</u></b>			
	<b>Class 0 copper pipes</b>			
110	15mm Pipes	m	5	
111	22mm Pipes	m	5	
	<b>Extra over class 0 copper pipes for capillary fittings</b>			
112	15mm Fittings	No	10	
113	22mm Pipes	No	10	
	<b>SUNDRIES</b>			
114	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	35	
115	Ditto, but in hard rock	m3	5	
116	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	10	
	<b>Carried Forward</b>			R
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
117	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	10	
	<b>TESTING</b>			
118	Allow for testing all drains, sanitary plumbing, water supplies and installation to the satisfaction of the Principle Agent.		Item	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>GLAZING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b>GLAZING TO STEEL WITH PUTTY</b>			
	<b>6,38mm Obscure safety glass</b>			
119	Panes not exceeding 0,1 m2	m2	5	
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>PAINTWORK</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b>PREPARATORY WORK TO EXISTING WORK</b>			
	Previously painted plastered surfaces			
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<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>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</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>ON FIBRE-CEMENT</b></p> <p>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</p>			
120	On fascias and barge boards	m2	15	
	<p><b>ON METAL</b></p> <p>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</p>			
121	On door frames	m2	5	
	<p>Spot prining defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</p>			
122	On windows with burglar bars	m2	5	
	<b>Carried Forward</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</b>			
123	On gates (Measured over the full flat area of both sides) m2	5		
	<b>ON WOOD</b>			
	<b>Under coat and minimum 2 coats gloss enamel, colour TBC</b>			
124	On doors (External) m2	5		
125	On doors (Internal) m2	5		
	<b>Carried to Summary</b>		R	
	Gr 4 - Waterborne			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b><u>SECTION 7</u></b>			
	<b><u>EXTERNAL WORKS</u></b>			
	<b><u>WATER SUPPLY</u></b>			
	<u>Class 10 HDPE type IV pipes</u>			
1	40mm Pipes laid in and including trenches not exceeding 1m deep	m		
2	50mm Pipes laid in and including trenches not exceeding 1m deep	m	290	
	<u>Extra over Class 10 HDPE type IV pipes for fittings</u>			
3	40mm Fittings	No		
4	40mm Reducer	No		
5	40mm Bend	No		
6	50mm Reducer	No	6	
7	50mm Bend	No	8	
8	50mm Threaded adaptor	No	8	
	<u>Galvanised medium steel pipes with screwed and socketed joints</u>			
9	50mm Pipes	m	250	
	<u>Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings</u>			
10	50mm Fittings	No	8	
11	50mm Bush	No	8	
12	50mm Elbow	No	8	
	<u>Valve boxes</u>			
	<b>Carried Forward</b>			R
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
13	600 x 600mm Stopcock box complete as per detail drawing "Valve chamber" including 400 x 400 cast iron cover and frame depth not exceeding 750mm internally.	No	4	
	<u>Sundries</u>			
14	300 x 300 x 50mm Precast concrete pipeline marker slab set in ground	No	2	
15	Cutting into existing water pipe	No	2	
	<b><u>WATER TANKS</u></b>			
	<b><u>ELEVATED WATER TANKS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Excavation in earth not exceeding 2m deep</u>			
16	Holes	m3	4	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
17	Soft rock	m3	1	
18	Hard rock	m3	2	
	<u>Extra over all excavations for carting away</u>			
19	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	1	
	Risk of collapse of excavations			
20	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	10	
	<u>Keeping excavations free of water.</u>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
21	Keeping excavations free of water.  <u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density</u>	Item		
22	Backfilling to trenches, holes, etc.  <u>Soil insecticide</u>	m3	1	
23	To bottoms and sides of trenches, etc.  <u>One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions.</u>	m2	4	
24	Under surface beds  15Mpa/19mm Concrete	m2	5	
25	Blinding  <u>25Mpa/19mm Concrete</u>	m3	1	
26	Bases	m3	4	
27	Platform surface beds cast in panels  <u>Finishing top surfaces of concrete smooth with a wood float</u>	m3	1	
28	Platform surface beds  <u>Finishing top surfaces of concrete smooth with a wood float</u>	m2	5	
29	On top of bases  <u>"Jojo" or equal approved SANS PVC water tanks</u>	m2	5	
30	5 000 Litre plastic water tank fitted onto and secured to tank platforms	No		
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
31	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	1	
	<u>Galvanized medium normalized mild steel piping</u>			
32	25mm Pipes	m	10	
33	50mm Pipes	m	10	
	<u>Extra over galvanised mild steel water supply pipes for fittings:</u>			
34	25mm Fittings.	No	10	
35	50mm Elbows.	No	10	
36	50mm Union.	No	10	
37	50mm Reducing bush.	No	10	
	<u>"Cobra Watertech" or other equal approved</u>			
38	15mm "Cobra Ref. 108LK" brass hose biptap.	No	3	
39	50mm Fullway gate valve	No	3	
	<u>The following in structural steel tank stands</u>			
	<u>Welded steel columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u>			
40	80 x 80mm x 6mm angle columns	t	0.20	
	<u>Steel members and girth, bolted to steel</u>			
41	30 x 30mm x 6mm Flat-bar	t	0.20	
42	40 x 40mm x 5mm angle	t	0.20	
43	125 x 75mm x 8mm unequal angle	t	0.20	
44	125 x 50mm x 20 x 2mm Lipped channel	t	0.20	
	<b>Carried Forward</b>			R
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>BOLTS, FASTENERS, ETC. (LI)</u></b>			
45	High tensile bolts	t	0.10	
46	12mm Diameter L-shaped threaded anchor bolt 350mm girth embedded in top of concrete	No	10	
	<b><u>ON METAL</u></b>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
47	Paint to structural steel	m	20	
	<b><u>TESTING</u></b>			
	<u>Testing of water tanks</u>			
48	Testing for tank		Item	
	<b><u>STAND PIPES</u></b>			
	<b><u>SEPTIC TANK AND FRENCH DRAINS</u></b>			
	<b><u>SEPTIC TANKS, ETC.</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
49	Allow the amount of R150 000.00 (One hundred and fifty thousand rand) for the refurbishment of the septic tank not clearly defined, to be used as directed by the principal agent and deducted in whole or in part if not required.		Item	
	<b><u>SITE CLEARANCE ETC</u></b>			
	<u>Site clearance</u>			
50	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	75	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>EXCAVATION, FILLING, ETC.</u></b>			
	<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>			
51	Holes	m3	100	
	Extra over all excavations for carting away			
52	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	40	
	<u>Risk of collapse of excavations</u>			
53	Sides of trench and hole excavations exceeding 1,5m deep and not exceeding not exceeding 3m deep	m2	70	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
54	Backfilling to trenches, holes, etc	m3	10	
	Keeping excavations free of water			
55	Keeping excavations free of all water other than subterranean water		Item	
	<b><u>REINFORCED CONCRETE</u></b>			
	<u>15MPa/19mm concrete</u>			
56	15Mpa in blinding	m3	3	
	<u>25MPa/19mm concrete</u>			
57	25Mpa in base	m3	10	
58	25Mpa in slab over septic tank	m3	10	
59	Concrete haunch formed below pipes	m3	1	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
60	Surface beds, slabs, etc. to falls	m2	30	
	<u>Permanent formwork to soffits</u>			
61	Slab over septic tank	m2	30	
	<u>Smooth formwork to form</u>			
62	Opening not exceeding 1m girth through 170mm slab	No	4	
	<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>			
	<u>Smooth formwork to sides</u>			
63	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25	
	<b><u>REINFORCEMENT</u></b>			
	<u>Fabric reinforcement</u>			
64	Type 888 fabric reinforcement in concrete surface beds, slabs, etc	m2	50	
	<b><u>MASONRY</u></b>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
65	One brick walls	m2	70	
	<u>Brickwork reinforcement</u>			
66	150mm Wide reinforcement built in horizontally	m	220	
	<u>Face bricks (purchase price of R5 000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
67	Extra over brickwork for face brickwork in foundation	m2	20	
	<b><u>BRICKWORK SUNDRIES</u></b>			
68	Leave of form 450 x 150mm high opening through a one brick wall	No	3	
69	Leave or form opening through one brickwall for pipe 110mm dia	No	3	
	<b><u>PLASTERING</u></b>			
	<u>Watertight cement plaster on brickwork</u>			
70	On walls	m2	60	
	Screed			
71	On floors	m2	25	
	<u>Two coats approved epoxy coats</u>			
72	On walls and floors	m2	80	
	<b><u>PLUMBING AND DRAINAGE</u></b>			
	<u>uPVC pipes</u>			
73	110mm Pipes	m	45	
	Extra over uPVC pipes for fittings			
74	110mm Tee	No	2	
	<u>Cover, etc</u>			
75	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	4	
76	Lifting key for manhole cover	No	1	
	<b><u>FRENCH DRAINS</u></b>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>SITE CLEARANCE ETC.</u></b>			
	<u>Site clearance</u>			
77	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	20	
	<b><u>EXCAVATION, FILLING, ETC.</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
78	Holes	m3	15	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
79	Soft rock	m3	1	
80	Hard rock	m3	1	
	<u>Extra over all excavations for carting away</u>			
81	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	10	
	<u>Risk of collapse of excavations</u>			
82	Sides of trench and hole excavations not exceeding 1,5m deep	m2	5	
	<u>Keeping excavations free of water</u>			
83	Keeping excavations free of all water other than subterranean water		Item	
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u>			
84	On top of french drain as soil cover	m3	10	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>FILTER FABRIC</u></b>			
	<u>"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions</u>			
85	"Kaymat U14" or equal approved around stone filling in sub-soil drain trenches	m2	20	
	<u>20mm Graded stone filling or similar approved</u>			
86	In holes	m3	5	
	200 - 300mm Diameter clean washed stone filling or similar approved by engineer			
87	In holes	m3	15	
	<b><u>WATERPROOFING</u></b>			
	<u>One layer of 250 micron "Tarkon USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
88	On top of pipes as protection of joints	m2	15	
	<b><u>ROOF SHEETING</u></b>			
	<u>Roof sheeting</u>			
89	On top of french drain	m2	15	
	<u>uPVC pipes</u>			
90	110mm pipes laid in and including trenches	m	15	
91	160mm pipes laid in and including trenches	m	10	
	<u>Extra over uPVC pipes for fittings</u>			
92	110mm End cap	No	4	
93	110mm Bend	No	2	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>WATER HARVESTING TANKS</u></b>			
	<b><u>WATER TANKS</u></b>			
	<b><u>SITE CLEARANCE ETC</u></b>			
	<u>Site clearance</u>			
94	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	65	
	<b><u>EXCAVATION, FILLING, ETC.</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
95	Trenches	m3	20	
	Extra over trench and hole excavations in earth for excavation in			
96	Soft rock	m3	5	
97	Hard rock	m3	2	
	<u>Extra over all excavations for carting away</u>			
98	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10	
	<u>Risk of collapse of excavations</u>			
99	Sides of trench and hole excavations not exceeding 1,5m deep	m2	20	
	<u>Keeping excavations free of water</u>			
100	Keeping excavations free of all water other than subterranean water	Item		
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
101	Backfilling to trenches, holes, etc	m3	7	
	<b><u>SOIL POISONING</u></b>			
	<u>Soil poisoning mixed in accordance to supplier's specifications</u>			
102	To bottoms and sides of trenches, etc.	m2	15	
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<u>25MPa/19mm concrete</u>			
103	Strip footings	m3	10	
104	Platform surface beds cast in panels	m3	5	
	<b><u>FINISHING TOP SURFACE OF CONCRETE</u></b>			
	<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>			
105	Surface beds, slabs, etc (rainwater tanks)	m2	35	
	<b><u>REINFORCEMENT</u></b>			
	<u>Fabric reinforcement</u>			
106	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	35	
	<b><u>TEST CUBES</u></b>			
107	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	3.0	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<b><u>BRICKWORK</u></b>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
108	One brick walls	m2	20	
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<u>Brickwork reinforcement</u>			
109	150mm Wide reinforcement built in horizontally	m	50	
	<b><u>FACE BRICKWORK</u></b>			
	<u>Face bricks (Purchase price of R5 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
110	Extra over brickwork for face brickwork	m2	25	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R3 500.00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
111	Coping on top of one brick wall	m	50	
	<b><u>WATERPROOFING</u></b>			
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
112	Under surface beds	m2	35	
	<b><u>WATER SUPPLIES</u></b>			
	<u>"Jojo" approved SANS PVC water tanks</u>			
113	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	3	
	<u>Galvanized medium normalized mild steel piping</u>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
114	25mm Pipes	m	10	
	<u>Extra over galvanised mild steel water supply pipes for fittings:</u>			
115	25mm Fittings.	No	10	
116	15mm "Cobra Ref. 108LK" brass hose biptap	No	5	
	<b><u>PAVED WALKWAYS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Site Clearance</u>			
117	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	345	
118	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	345	
	<u>Open face excavation in earth over sloping site</u>			
119	Excavation in earth not exceeding 2m open face excavation to form platforms under parking areas etc and depositing excavated material over site, including haulage not exceeding 10m from perimeter of excavations exceeding 2m deep	m3	600	
	<u>Extra over all excavations for carting away</u>			
120	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	600	
	<u>Earth filling supplied by the contractor under parking areas, roadways, etc</u>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
121	Sub-base course of G5 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density	m3	60	
	<u>Compaction of surfaces</u>			
122	Compaction of ground surface under floors etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	345	
	<u>Soil poisoning</u>			
123	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m <sup>2</sup> on cleared ground	m2	345	
	<u>60mm Thick precast concrete DZZ interlocking heavy duty block paving of grey paving blocks in accordance with SANS 1058, laid to falls on and including 25mm thick sand layer with joints filled in with sand, compacted with a vibration compactor:</u>			
124	Paving to toilet areas etc. to falls	m2	345	
125	Fig. 10 kerbs to sides of paving	m	250	
126	15Mpa/19mm unreinforced concrete in haunching	m3	50	
	<b><u>STORMWATER CONTROL</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>Earthworks</u>			
127	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	740	
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
128	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, paving, etc.	m3	70	
129	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	50	
130	Extra over trench or hole for excavations in soft rock	m3	30	
131	Extra over trench or hole for excavations in hard rock	m3	25	
132	Re-compaction of disturbed formation levels, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	740	
133	Treat soil under concrete rain water channels, etc. with an approved insecticide solution at the rate not less than 2 litre per 1m2	m2	740	
	<u>Reinforced Concrete</u>			
134	25Mpa/19mm Mass concrete in V-shaped channel 2000mm wide x 75mm thick with rounded salient edges and finished on exposed surfaces with 2:1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2,0m long with 12mm bitumen impregnated soft board movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork	m	60	
135	Extra for fair open end	No	8	
136	Extra for fair stopped end	No	8	
137	Extra for angle intersection	No	10	
	<b><u>FENCING AROUND TANK STANDS</u></b>			
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
	<p><b><u>FENCING</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>For preambles see "Specifications of materials and methods to be used - PW 371"</p> <p><u>Welded mesh fence</u></p> <p><b><u>Panels:</u></b> 1.80m x 3.0m</p> <p><b><u>Palings 'DevilFork':</u></b> 21 palings per panel. 30 x 30 x 2mm steel angle iron paling 1.8m high. Palings are to be inserted and firmly welded to the bearers at 133mm centre to centre. The top of the paling should provide a "Devil fork" effect and the bottom will have a dove tail.</p> <p><b><u>Fence bearers:</u></b> 40 x 40 x 2mm angle iron. These are places 300mm from the top of the paling and 300mm from the bottom paling (350mm from ground level). These are to be welded flash with the back of the post</p> <p><b><u>Painting:</u></b> All joints must be smoothed off. All faux, rust, grease and loose material to be removed before painting. Apply one coat primer for steel (red oxide), apply one coat universal undercoat for all surfaces, apply one coat gloss enamel. The colour of the gloss enamel paint shall be traffic green unless directed otherwise by the Limpopo Department of Education (not school) No brush painting</p>	m	670	
138				
	<b>Carried Forward</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b>Brought Forward</b>		R	
139	<p><b><u>Posts:</u></b></p> <p>76 x 76 x 2mm steel square tubing with closing pyramid caps on top. The post should be at least 2.4m high and 600mm will be planted into the concrete footing in accordance to the engineers design</p>	No 224		
140	<p><b><u>Palisade Gates</u></b></p> <p><u>Sliding Gate:</u> 5m wide x 1.8m high, 40 x 40 x 2mm angle iron palings welded to a 76 x 38 x 2 mm rectangular tubing bearer frame. Plings must be placed at 133 mm apart from each other centre to centre. The gate is to be provided with proper closing and guidance mechanism. The track should be 12mm steel rod welded to a 40 x 40 x 5mm angle iron fixed into a 300 wide x 400 thick x 5m length of the gate</p> <p><u>Gate post:</u> 75mm x 75mm x 2mm steel square tubing post is to be provided on each side of the gate opening with closing pyramid caps on top. The post is to be founded in a concrete footing 450 x 450 x 600 deep. Concrete strength to be 20MPa (minimum) at 28 days</p> <p><u>Painting:</u> All joints must be smoothed off. All faux, rust, grease and loose material to be removed before painting. Apply one coat primer for steel (red oxide), apply one coat universal undercoat for all surfaces, apply one coat gloss enamel. The colour of the gloss enamel paint shall be traffic green unless directed otherwise by the Limpopo Department of Education (not school) No brush painting</p>	No 1		
	<b>Carried to Summary</b>		R	
	External works			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b><u>SECTION 8</u></b>			
1	Electrical works	Item		
2	Add profit and attendance	%		
3	Borehole refurbishment/ Equipping	Item		
4	Add profit and attendance	%		
5	Refurbishments of existing ablutions	Item		
6	Add profit and attendance	%		
	<b>Carried to Summary</b>			
	Provisional Sums			R
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Bill No	<u>FINAL SUMMARY</u>	Page No	Amount
1	P's and G's	31	
2	Alterations	34	
3	F6 + D - enviroloo	59	
4	S7 + D - enviroloo	84	
5	M2 + D - enviroloo	104	
6	Gr 4 - Waterborne	124	
7	External works	142	
8	Provisional Sums	143	
	Sub-total		R
	Contingency sum (@10%)		R
	Sub Total		R
	VAT		R
			R
	<b>R MAHANGE &amp; ASSOCIATES</b>		