

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 1</u></p> <p><u>BILL NO. 1</u></p> <p><u>PRELIMINARIES</u></p> <p><u>BUILDING AGREEMENT AND PRELIMINARIES</u></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 style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			
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Item No		Quantity	Rate	Amount
	<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><u>PREAMBLES FOR TRADES</u></p> <p>1 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><u>GENERAL</u></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 style="text-align: right;">m</p> <p style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			
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Item No	Quantity	Rate	Amount
<u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u>			
<u>Definitions (A1)</u>			
Definitions and interpretation (clause 1)			
F:..... V:..... T:.....	Item		
<u>Objective and Preparation (A2 to A14)</u>			
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			
Carried to Collection			
P's and G's		R	
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	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			
	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			
	Site representative (clause 6)			
	F:..... V:..... T:.....	Item		
	Compliance with regulations (clause 7)			
	F:..... V:..... T:.....	Item		
	Works risk (clause 8)			
	F:..... V:..... T:.....	Item		
	Indemnities (clause 9)			
	F:..... V:..... T:.....	Item		
	Works insurances (clause 10)			
	F:..... V:..... T:.....	Item		
	Liability insurances (clause 11)			
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
F:..... V:..... T:.....	Item			
Effecting insurance (clause 12)				
F:..... V:..... T:.....	Item			
NO CLAUSE (Clause 13)				
Security (clause 14)				
F:..... V:..... T:.....	Item			
<u>Execution (A15-A23)</u>				
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			
Carried to Collection			R	
P's and G's				
R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	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		
	Selected subcontractors (clause 21)			
	F:..... V:..... T:.....	Item		
	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			
	All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors			
	Employer's Direct Contractors (clause 22)			
	F:..... V:..... T:.....	Item		
	Contractor's Domestic Sub-Contractors (Clause 23)			
	F:..... V:..... T:.....	Item		
	<u>Completion (A24-A30)</u>			
	Practical completion (clause 24)			
	F:..... V:..... T:.....	Item		
	Works completion (clause 25)			
	F:..... V:..... T:.....	Item		
	Final completion (clause 26)			
	F:..... V:..... T:.....	Item		
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Latent defects liability period (clause 27)			
	F:..... V:..... T:.....	Item		
	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		
	<u>Payment (A31 - A35)</u>			
	Interim payment to the contractor (clause 31)			
	F:..... V:..... T:.....	Item		
	Adjustment to the contract value (clause 32)			
	F:..... V:..... T:.....	Item		
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	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)			
	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)			
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<p><u>THE SCHEDULE</u></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><u>42.1 CONTRACTING AND OTHER PARTIES</u></p> <p>42.1.1 Employer: THE MVULA TRUST</p> <p>42.1.2 Principal Agent: R Mahange and Associates</p>	Item		
	<p style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>		R	

Item No		Quantity	Rate	Amount
	<p><u>42.2 CONTRACT DETAILS</u></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</p> <p style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			

Item No		Quantity	Rate	Amount
	N/A			
	42.2.9 The law applicable to this agreement shall be that of			
	<i>South Africa (country)</i>			
	<u>42.3 INSURANCES</u>			
	42.3.1 Contract works insurance to be effected by:			
	<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>			
	42.3.2 Supplementary insurance is required			
	<i>No</i>			
	42.3.3 Public liability insurance to be effected by:			
	<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>			
	<u>42.4 DOCUMENTS</u>			
	42.4.1 Waivers of contractors lien or right of continuing possession is required			
	<i>Yes</i>			
	42.4.2 Number of construction document copies to be supplied to the contractor free of charge:			
	3 Number of			
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p>42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:</p> <p>“Standard System of Measuring Builders’ Work”</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: center;">5 working days</p> <p style="text-align: center;"><i>The priced bills of quantities must be handed in with the tender</i></p> <p>42.4.5 JBCC Engineering General Conditions are to be included in the contract documents:</p> <p style="text-align: right;">No</p> <p>42.4.6 The contract value is to be adjusted using escalation adjustment indices</p> <p style="text-align: right;">No</p> <p style="text-align: center;">Where JBCC CPAP is to be used</p> <p style="text-align: center;">Base Month N/A</p> <p>42.4.7 Details of changes made to the provision of JBCC standard documentation:</p> <p style="text-align: center;">Part 1 - Contract Data completed by Employer</p> <p><u>SECTION B: PRELIMINARIES</u></p> <p><u>Definitions and interpretation (B1)</u></p> <p>Definition and interpretation (B1.1 - B1.4.6)</p> <p style="text-align: center;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			

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Item No		Quantity	Rate	Amount
	F:..... V:..... T:..... Existing premises occupied (B3.4)	Item		
	F:..... V:..... T:..... 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.	Item		
	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		
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No	Quantity	Rate	Amount
<u>Management of contract (B4)</u>			
Management of the works (B4.1)			
F:..... V:..... T:.....	Item		
Programme for the works (B4.2)			
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		
<u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u>			
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		
Carried to Collection			
P's and G's		R	
R MAHANGE & ASSOCIATES			

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

Item No		Quantity	Rate	Amount
	Option [A] shall apply			
	F:..... V:..... T:.....	Item		
	Telecommunication facilities (B7.4)			
	F:..... V:..... T:.....	Item		
	Ablution facilities (B7.5)			
	Option [A] shall apply			
	F:..... V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
	Responsibility for prime cost amounts (B8.1)			
	F:..... V:..... T:.....	Item		
	<u>Attendance on N/S Subcontractors (B9)</u>			
	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		
	<u>Financial aspects (B10)</u>			
	Statutory taxes, duties and levies (B10.1)			
	F:..... V:..... T:.....	Item		
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Payment of preliminaries (B10.2)			
	Option [B] shall apply			
	F:..... V:..... T:.....	Item		
	Adjustment of preliminaries (B10.3)			
	Option [A] shall apply			
	F:..... V:..... T:.....	Item		
	Payment certificate cash flow (B10.4)			
	F:..... V:..... T:.....	Item		
	<u>General (B11)</u>			
	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)			
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
F:..... V:..... T:.....	Environmental Disturbance (B11.6)	Item		
F:..... V:..... T:.....	Works cleaning and clearing (B11.7)	Item		
F:..... V:..... T:.....	Vermin (B11.8)	Item		
F:..... V:..... T:.....	Overhand work (B11.9)	Item		
F:..... V:..... T:.....	Instruction manuals and guarantees (B11.10)	Item		
F:..... V:..... T:.....	As built information (B11.11)	Item		
F:..... V:..... T:.....	Tenant Installations (B11.12)	Item		
Carried to Collection			R	
P's and G's				
R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	<u>Schedule of variables (B12)</u>			
	Pre-tender information (B12.1)			
	F:..... V:..... T:.....	Item		
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional:			
	No			
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete			
	No			
	12.1.3 Interest of agents (B2.4)			
	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			
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	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			
	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)			
	Carried to Collection			
	P's and G's		R	
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
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			
	<u>Post tender information (B12.2)</u>			
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			
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included			
	Carried to Collection		R	
P's and G's				
	R MAHANGE & ASSOCIATES			

Item No	Quantity	Rate	Amount
Site instructions			
Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor			
F:..... V:..... T:.....	Item		
Black economic empowerment and training			
F:..... V:..... T:.....	Item		
Proprietary branded products			
F:..... V:..... T:.....	Item		
Testing of flat roof waterproofing for water tightness			
Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing			
F:..... V:..... T:.....	Item		
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			
Contract instructions			
F:..... V:..... T:.....	Item		
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			
Carried to Collection		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p>Labour record</p> <p>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>	Item		
	<p>Plant record</p> <p>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>	Item		
	<p>Guarantees</p> <p>F:..... V:..... T:.....</p> <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>	Item		
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p>Overtime</p> <p>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>F:..... V:..... T:.....</p> <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>F:..... V:..... T:.....</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
	Carried to Collection		R	
	<p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			

Item No		Quantity	Rate	Amount
	<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> <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>F:..... V:..... T:.....</p> <p style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>			
		Item	R	

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Item No	Description	Quantity	Rate	Amount
	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)			
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)			
	Carried to Collection		R	
P's and G's				
R MAHANGE & ASSOCIATES				

Item No	Quantity	Rate	Amount
F:..... V:..... T:..... Provision of gloves (Covid-19) Provision of personal protective equipment (PPE)	Item		
F:..... V:..... T:..... Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid-19) Provision of personal protective equipment (PPE)	Item		
F:..... V:..... T:..... Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19) Provision of personal protective equipment (PPE)	Item		
F:..... V:..... T:..... Provision of digital infra red non-contact body thermometer (Covid-19, minimum of two per site entrance) Provision of personal protective equipment (PPE)	Item		
F:..... V:..... T:..... Provision of perspex screens for office staff (Covid-19, minimum size 600 x 500mm) Provision of personal protective equipment (PPE)	Item		
F:..... V:..... T:..... Provision of signage, including Covid-19 related signage Provision of personal protective equipment (PPE)	Item		
Carried to Collection		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	F:..... V:..... T:..... Provision of full time construction health and safety officer (SACPCMP Registered) Provision of personal protective equipment (PPE)	Item		
	F:..... V:..... T:..... Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations Provision of personal protective equipment (PPE)	Item		
	F:..... V:..... T:..... Medical screenings, examinations, etc. in terms of Covid 19 regulations Provision of personal protective equipment (PPE)	Item		
	F:..... V:..... T:..... Induction training, including Covid-19 training Provision of personal protective equipment (PPE)	Item		
	F:..... V:..... T:..... Provision of first aid boxes to GSR requirements Provision of personal protective equipment (PPE)	Item		
	F:..... V:..... T:..... Noise monitoring including establishment of noise zones (plant), audio grams (personnel), etc.	Item		
	F:..... V:..... T:.....	Item		
	Carried to Collection		R	
	P's and G's			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p>Submission of health and safety file</p> <p>HIV/AIDS Awareness</p> <p>F:..... V:..... T:.....</p> <p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under 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><u>SUMMARY OF CATEGORIES</u></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p> <p style="text-align: right;">Carried to Collection</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>	Item		
			R	

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Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>DEMOLITIONS AND ALTERATIONS</u></p> <p><u>ALTERATIONS</u></p> <p>SUPPLEMENTARY PREAMBLES</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;">Carried to Collection</p> <p>Alterations</p> <p>R MAHANGE & ASSOCIATES</p>		R	

Item No		Quantity	Rate	Amount
	<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><u>DEMOLITIONS AND ALTERATIONS</u></p> <p><u>DEMOLITIONS OF EXISTING TOILET STRUCTURES</u></p>			
1	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	No	8	
	Carried to Collection			R
	Alterations			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
2	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	1	
<p style="text-align: right;">Carried to Collection</p> <p>Alterations</p> <p>R MAHANGE & ASSOCIATES</p>			R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 3</u></p> <p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 style="text-align: right;">Carried to Collection</p> <p>FD3 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			
			R	

Item No	Quantity	Rate	Amount
<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>Soil poisoning</p> <p>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</p> <p><u>SITE CLEARANCE ETC</u></p> <p>Site clearance</p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2 40</p> <p>2 Stripping average 100mm thick layer of top soil and stockpiling on site m2 40</p> <p><u>EXCAVATION, FILLING, ETC</u></p> <p>Excavation in earth not exceeding 2m deep</p> <p>3 Trenches m3 15</p> <p>4 Thickening under aprons m3 5</p> <p>Extra over trench and hole excavations in earth for excavation in</p> <p>5 Soft rock m3 5</p> <p>6 Hard rock m3 5</p> <p style="text-align: right;">Carried to Collection</p> <p>FD3 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			

Item No		Quantity	Rate	Amount
	Extra over all excavations for carting away			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	5	
	Risk of collapse of excavations			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	50	
	Keeping excavations free of water			
9	Keeping excavations free of all water other than subterranean water	Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
10	Under floors, steps, paving, etc	m3	15	
11	Backfilling to trenches, holes, etc	m3	10	
	Compaction of surfaces			
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	10	
	Under floors, steps, paving, etc.			
	Prescribed density tests on filling			
13	Modified AASHTO Density	No	10	
	<u>SOIL POISONING</u>			
	Weedkiller mixed in accordance to supplier's specifications			
14	To bottoms and sides of trenches, etc.	m2	50	
	Carried to Collection			R
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	Finishing top surfaces of concrete smooth with a wood float/steel trowel			
23	Surface beds, slabs, etc	m2	20	
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)			
	Smooth formwork to sides			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	5	
	<u>REINFORCEMENT (PROVISIONAL)</u>			
	Mild steel reinforcement to structural concrete work			
25	8mm Diameter bars	t	0.50	
26	10mm Diameter bars	t	0.50	
	Fabric Reinforcement			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontally in surface beds etc.	m2	20	
	Carried to Collection			
	FD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
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			
<u>FOUNDATIONS (PROVISIONAL)</u>			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	15
29	Half brick walls	m2	5
FACE BRICKWORK			
Carried to Collection			
FD3 - Waterborne			
R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	Brickwork reinforcement			
40	75mm Wide reinforcement built in horizontally	m	55	
41	150mm Wide reinforcement built in horizontally	m	230	
	Galvanised wire ties etc			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	25	
	Turning pieces to lintels etc.			
43	115mm Wide turning pieces	m	55	
44	230mm Wide turning pieces	m	230	
	Prestressed fabricated lintels			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10	
	Air bricks etc.			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	50	
	Carried to Collection		R	
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls m2	5		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds m2	20		
49	Under aprons and ramps m2	30		
	<u>FLOOR AND WALL SEALERS</u>			
	Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
50	Around steel windows and door frames m	15		
	Carried to Collection		R	
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>ROOFS, ETC.</u>			
	Sawn softwood grade 6			
53	76 x 38mm Wall plates	m	20	
54	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	25	
55	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m		
56	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	25	
	Sundries			
57	Two coats creosote on sawn timbers	m2	35	
58	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	30	
59	Hurricane clips	No	35	
	<u>EAVES, VERGES, ETC</u>			
	Pressed fibre-cement:			
60	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	25	
	Carried to Collection			
	FD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

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Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
64	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2	
<u>LOCKS</u>			
Approved			
65	Three lever mortice lock set	No 2	
66	Indicator lock set	No 2	
67	Security double throw dead lock (no latch)	No 2	
<u>HANDLES, ETC.</u>			
Aluminium Pull Handle			
68	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Item	
<u>SUNDRIES</u>			
Carried to Collection			
FD3 - Waterborne			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	ASSA ABLOY			
69	38mm Diameter rubber door stop plugged	No	2	
	Vaal Paragon			
70	32mm Type 9 back grab rail 800mm long plugged	No	1	
71	32mm Type 8 side grab rail 900mm girth plugged	No	1	
	<u>LETTERS, NAMEPLATES, ETC</u>			
	Dorma:			
72	DSS-130 Engraved "Male" information sign, plugged	No		
73	DSS-131 Engraved "Female" information sign, plugged	No	1	
74	DSS-132 Engraved "Male/Female" information sign, plugged	No		
75	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
	<u>BATHROOM FITTINGS</u>			
	Sundries			
	Kimberley-Clark or Similar			
76	SQ2 code 405607B white none lockable toilet roll holder	No	3	
	stainless Steel			
77	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	1	
78	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	1	
	Carried to Collection			
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>WELDED SCREENS, GATES, ETC</u>			
	Gates to external doors			
79	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	1,2mm Double rebated frames suitable for half brick walls			
80	Frame for door size 813 x 2032mm high	No	2	
	1,2mm Double rebated frames suitable for one brick walls			
81	Frame for door size 813 x 2032mm high	No	1	
82	Frame for door size 914 x 2032mm high	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
	Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
83	Window type NE1, size 533 x 654mm high	No	4	
84	Window type NE7, size 1022 x 654mm high	No	1	
	Carried to Collection			R
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
	RAINWATER DISPOSAL			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	Aluminium Zinc Seamless Gutters			
88	100 x 100mm standard rainwater gutters fixed with gutter brackets	m	20	
89	Extra over eaves gutter for stopped end	No	4	
90	75 x 100mm Diameter rainwater down pipes fixed to wall	m	10	
91	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
92	Ditto .for shoe	No	4	
	<u>SANITARY FITTINGS</u>			
	"Vaal" or similar and approved			
93	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	2	
94	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	2	
	Carried to Collection			
	FD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
95	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	
96	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No		
	PRECAST CONCRETE WASH HAND TROUGH			
97	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	
	Rainwater tank, etc.			
98	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No		
	<u>SOIL DRAINAGE</u>			
	uPVC pipes			
99	110mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
	Extra over uPVC pipes for fittings			
100	110mm Bend	No	5	
101	110mm Junction	No	5	
	uPVC gulleys			
102	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete sorround etc.	No	5	
	<u>WASTE UNIONS ETC</u>			
	Carried to Collection			
	FD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	"Cobra Watertech"			
103	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	2	
	TRAPS ETC			
	"Cobra Watertech"			
104	Cobra Ref. 365/40" CP bottle trap	No	2	
	Marley			
105	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2	
	TAPS, VALVES, ETC			
106	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	2	
107	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	
	<u>SANITARY PLUMBING</u>			
	uPVC pipes			
108	50mm Pipes	m	50	
	Extra over uPVC pipes for fittings			
109	50mm Bend	No	10	
110	50mm Access bend	No	10	
111	50mm Junction	No	10	
	Carried to Collection			R
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>WATER SUPPLIES</u>			
	Class 0 copper pipes			
112	15mm Pipes m	10		
113	22mm Pipes m	10		
	Extra over class 0 copper pipes for capillary fittings			
114	15mm Fittings No	5		
115	22mm Pipes No	5		
	SUNDRIES			
116	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock m3	30		
117	Ditto, but in hard rock m3	5		
118	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor m3	5		
119	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor m3	25		
	TESTING			
120	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item		
	Carried to Collection		R	
	FD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BILL NO. 12</u>			
<u>GLAZING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
GLAZING TO STEEL WITH PUTTY			
6,38mm Obscure safety glass			
121	Panes for NE1	No 4	
122	Panes for NE7	No 1	
Carried to Collection			
FD3 - Waterborne			
R MAHANGE & ASSOCIATES			

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BILL NO. 13</u>			
<u>PAINTWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<u>PAINTWORK ETC TO NEW WORK</u>			
PREPARATORY WORK TO EXISTING WORK			
Previously painted plastered surfaces			
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			
Previously painted metal surfaces			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
Previously painted wood surfaces			
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			
ON FIBRE-CEMENT			
Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint			
123	On fascias and barge boards	m2	30
Carried to Collection			R
FD3 - Waterborne			
R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 4</u></p> <p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 style="text-align: right;">Carried to Collection</p> <p>MD3 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			
			R	

Item No	Quantity	Rate	Amount
<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>Soil poisoning</p> <p>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</p> <p><u>SITE CLEARANCE ETC</u></p> <p>Site clearance</p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2 90</p> <p>2 Stripping average 100mm thick layer of top soil and stockpiling on site m2 90</p> <p><u>EXCAVATION, FILLING, ETC</u></p> <p>Excavation in earth not exceeding 2m deep</p> <p>3 Trenches m3 20</p> <p>4 Thickening under aprons m3 15</p> <p>Extra over trench and hole excavations in earth for excavation in</p> <p>5 Soft rock m3 5</p> <p>6 Hard rock m3 5</p> <p style="text-align: right;">Carried to Collection</p> <p>MD3 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			

Item No		Quantity	Rate	Amount
	Extra over all excavations for carting away			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	5	
	Risk of collapse of excavations			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	90	
	Keeping excavations free of water			
9	Keeping excavations free of all water other than subterranean water	Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
10	Under floors, steps, paving, etc	m3	15	
11	Backfilling to trenches, holes, etc	m3	13	
	Compaction of surfaces			
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	
	Under floors, steps, paving, etc.			
	Prescribed density tests on filling			
13	Modified AASHTO Density	No	10	
	<u>SOIL POISONING</u>			
	Weedkiller mixed in accordance to supplier's specifications			
14	To bottoms and sides of trenches, etc.	m2	90	
	Carried to Collection			R
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	70	
	Soil insecticide			
16	To bottoms and sides of trenches etc	m2	90	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	70	
Carried to Collection				R
MD3 - Waterborne				
R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>UNREINFORCED CONCRETE, ETC.</u>			
	15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	5	
	25MPa/19mm concrete			
19	Strip footings	m3	10	
	REINFORCED CONCRETE			
	25MPa/19mm concrete			
20	Surface beds	m3	5	
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		
	TEST CUBES			
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	
	CONCRETE SUNDRIES			
	Carried to Collection			R
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
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			
<u>FOUNDATIONS (PROVISIONAL)</u>			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	15
29	Half brick walls	m2	5
FACE BRICKWORK			
Carried to Collection			
MD3 - Waterborne			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:			
30	Extra over brickwork for face brickwork	m2	15	
	SUPERSTRUCTURE			
	Brickwork of NFP bricks in class II mortar			
31	Half brick wall	m2	60	
32	Half brick walls in beamfilling .	m2	5	
33	One brick walls	m2	130	
	FACE BRICKWORK			
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:			
34	Extra over brickwork for face brickwork	m2	130	
	Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:			
35	Extra over brickwork for brick-on-edge header course lintel	m	15	
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	10	
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No		
	<u>BRICKWORK SUNDRIES</u>			
	Carried to Collection		R	
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Brickwork reinforcement			
40	75mm Wide reinforcement built in horizontally	m	50	
41	150mm Wide reinforcement built in horizontally	m	270	
	Galvanised wire ties etc			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	25	
	Turning pieces to lintels etc.			
43	115mm Wide turning pieces	m	35	
44	230mm Wide turning pieces	m	35	
	Prestressed fabricated lintels			
45	110 x 75mm Lintels in lengths not exceeding 3m	m	10	
46	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m		
	Air bricks etc.			
47	230 x 152mm terra-cotta vermin proofed louvered air brick	No	25	
	Carried to Collection			
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>ROOFS, ETC.</u>			
	Sawn softwood grade 6			
53	76 x 38mm Wall plates	m	35	
54	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	40	
55	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m		
56	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	40	
	Sundries			
57	Two coats creosote on sawn timbers	m2	80	
58	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	40	
59	Hurricane clips	No	40	
	<u>EAVES, VERGES, ETC</u>			
	Pressed fibre-cement:			
60	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	35	
	Carried to Collection			
	MD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	HINGES, BOLTS, ETC			
	100mm Chrome plated "D" type handle 3 by solid brace hinges			
	CATCHES,CABIN HOOKS, ETC			
63	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2		
	<u>LOCKS</u>			
	Approved			
64	Three lever mortice lock set	No 2		
65	Indicator lock set	No 2		
66	Security double throw dead lock (no latch)	No 2		
	<u>HANDLES, ETC.</u>			
	Aluminium Pull Handle			
67	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Item		
	<u>SUNDRIES</u>			
	Carried to Collection		R	
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No			Quantity	Rate	Amount
	ASSA ABLOY				
68	38mm Diameter rubber door stop plugged	No	2		
	Vaal Paragon				
69	32mm Type 9 back grab rail 800mm long plugged	No	1		
70	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	<u>LETTERS, NAMEPLATES, ETC</u>				
	Dorma:				
71	DSS-130 Engraved "Male" information sign, plugged	No	1		
72	DSS-131 Engraved "Female" information sign, plugged	No			
73	DSS-132 Engraved "Male/Female" information sign, plugged	No			
74	DSS-133 Engraved "Disabled" information sign, plugged	No	1		
	<u>BATHROOM FITTINGS</u>				
	Sundries				
	Kimberley-Clark or Similar				
75	SQ2 code 405607B white none lockable toilet roll holder	No	3		
	stainless Steel				
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			
	Carried to Collection			R	
	MD3 - Waterborne				
	R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>WELDED SCREENS, GATES, ETC</u>			
	Gates to external doors			
78	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	1,2mm Double rebated frames suitable for half brick walls			
79	Frame for door size 813 x 2032mm high	No	2	
	1,2mm Double rebated frames suitable for one brick walls			
80	Frame for door size 813 x 2032mm high	No	2	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
	Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
81	Window type NE1, size 533 x 654mm high	No	6	
82	Window type NE7, size 1022 x 654mm high	No	3	
	<u>Sundries</u>			
	Carried to Collection		R	
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
	RAINWATER DISPOSAL			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	Aluminium Zinc Seamless Gutters			
86	100 x 100mm standard rainwater gutters fixed with gutter brackets	m	20	
87	Extra over eaves gutter for stopped end	No	4	
88	75 x 100mm Diameter rainwater down pipes fixed to wall	m	10	
89	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
90	Ditto .for shoe	No	4	
	<u>SANITARY FITTINGS</u>			
	"Vaal" or similar and approved			
91	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	1	
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	2	
	Carried to Collection			
	MD3 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
93	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	1	
94	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	3	
	PRECAST CONCRETE WASH HAND TROUGH			
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	
	Rainwater tank, etc.			
96	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No		
	<u>SOIL DRAINAGE</u>			
	uPVC pipes			
97	110mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
	Extra over uPVC pipes for fittings			
98	110mm Bend	No	10	
99	110mm Junction	No	10	
	uPVC gulleys			
100	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	10	
	<u>WASTE UNIONS ETC</u>			
	Carried to Collection			
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			
			R	

Item No		Quantity	Rate	Amount
	"Cobra Watertech"			
101	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	2	
	TRAPS ETC			
	"Cobra Watertech"			
102	Cobra Ref. 365/40" CP bottle trap	No	2	
	Marley			
103	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2	
	TAPS, VALVES, ETC			
104	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	2	
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	3	
	<u>SANITARY PLUMBING</u>			
	uPVC pipes			
106	50mm Pipes	m	50	
	Extra over uPVC pipes for fittings			
107	50mm Bend	No	10	
108	50mm Access bend	No	10	
109	50mm Junction	No	10	
	Carried to Collection			R
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>WATER SUPPLIES</u>			
	Class 0 copper pipes			
110	15mm Pipes m	10		
111	22mm Pipes m	10		
	Extra over class 0 copper pipes for capillary fittings			
112	15mm Fittings No	10		
113	22mm Pipes No	10		
	SUNDRIES			
114	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock m3	30		
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	5		
117	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor m3	25		
	TESTING			
118	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item		
	Carried to Collection		R	
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BILL NO. 12</u></p> <p><u>GLAZING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>GLAZING TO STEEL WITH PUTTY</p> <p>6,38mm Obscure safety glass</p>			
119	<p>Panes not exceeding 0,1 m2</p>	m2	4	
	<p style="text-align: right;">Carried to Collection</p> <p>MD3 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>		R	

Item No	Quantity	Rate	Amount
<u>SECTION NO.4</u>			
<u>BILL NO. 13</u>			
<u>PAINTWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<u>PAINTWORK ETC TO NEW WORK</u>			
PREPARATORY WORK TO EXISTING WORK			
Previously painted plastered surfaces			
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			
Previously painted metal surfaces			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
Previously painted wood surfaces			
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			
ON FIBRE-CEMENT			
Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint			
120	On fascias and barge boards	m2	50
Carried to Collection			R
MD3 - Waterborne			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	ON METAL			
	Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.			
121	On door frames m2	5		
	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			
122	On windows with burglar bars m2	5		
	1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)			
123	On gates (Measured over the full flat area of both sides) m2	5		
	ON WOOD			
	Under coat and minimum 2 coats gloss enamel, colour TBC			
124	On doors (External) m2	5		
125	On doors (Internal) m2	5		
	Carried to Collection		R	
	MD3 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 style="text-align: right;">Carried to Collection</p> <p>SD4 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			
			R	

Item No	Quantity	Rate	Amount
<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>Soil poisoning</p> <p>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</p> <p><u>SITE CLEARANCE ETC</u></p> <p>Site clearance</p> <p>1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2 240</p> <p>2 Stripping average 100mm thick layer of top soil and stockpiling on site m2 245</p> <p><u>EXCAVATION, FILLING, ETC</u></p> <p>Excavation in earth not exceeding 2m deep</p> <p>3 Trenches m3 25</p> <p>4 Thickening under aprons m3 15</p> <p>Extra over trench and hole excavations in earth for excavation in</p> <p>5 Soft rock m3 5</p> <p>6 Hard rock m3 10</p> <p style="text-align: right;">Carried to Collection</p> <p>SD4 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			

Item No		Quantity	Rate	Amount
	Extra over all excavations for carting away			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	15	
	Risk of collapse of excavations			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	85	
	Keeping excavations free of water			
9	Keeping excavations free of all water other than subterranean water	Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
10	Under floors, steps, paving, etc	m3	30	
11	Backfilling to trenches, holes, etc	m3	15	
	Compaction of surfaces			
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	10	
	Under floors, steps, paving, etc.			
	Prescribed density tests on filling			
13	Modified AASHTO Density	No	10	
	<u>SOIL POISONING</u>			
	Weedkiller mixed in accordance to supplier's specifications			
14	To bottoms and sides of trenches, etc.	m2	95	
	Carried to Collection			R
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	70	
	Soil insecticide			
16	To bottoms and sides of trenches etc	m2	95	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	95	
Carried to Collection				R
SD4 - Waterborne				
R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>UNREINFORCED CONCRETE, ETC.</u>			
	15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2	
	25MPa/19mm concrete			
19	Strip footings	m3	10	
	REINFORCED CONCRETE			
	25MPa/19mm concrete			
20	Surface beds	m3	3	
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		
	TEST CUBES			
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	
	CONCRETE SUNDRIES			
	Carried to Collection		R	
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No	Quantity	Rate	Amount
<u>SECTION NO.5</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
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			
<u>FOUNDATIONS (PROVISIONAL)</u>			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2 10	
29	Half brick walls	m2 10	
FACE BRICKWORK			
Carried to Collection			R
SD4 - Waterborne			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:			
30	Extra over brickwork for face brickwork	m2	20	
	SUPERSTRUCTURE			
	Brickwork of NFP bricks in class II mortar			
31	Half brick walls in beamfilling .	m2	20	
32	Half brick walls	m2	25	
33	One brick walls	m2	180	
	FACE BRICKWORK			
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:			
34	Extra over brickwork for face brickwork	m2	180	
	Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:			
35	Extra over brickwork for brick-on-edge header course lintel	m	20	
36	110mm Wide sill set level and slightly projecting	m	10	
37	220mm Wide sill set sloping and slightly protecting outside	m	15	
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	5	
	<u>BRICKWORK SUNDRIES</u>			
	Carried to Collection		R	
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	Brickwork reinforcement			
40	75mm Wide reinforcement built in horizontally m	75		
41	150mm Wide reinforcement built in horizontally m	430		
	Galvanised wire ties etc			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork No	60		
	Turning pieces to lintels etc.			
43	115mm Wide turning pieces m	20		
44	230mm Wide turning pieces m	25		
	Prestressed fabricated lintels			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m m	15		
	Air bricks etc.			
46	230 x 152mm terra-cotta vermin proofed louvered air brick No	85		
	Carried to Collection		R	
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>ROOFS, ETC.</u>			
	Sawn softwood grade 6			
52	76 x 38mm Wall plates	m	50	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	55	
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	55	
	Sundries			
56	Two coats creosote on sawn timbers	m2	125	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	55	
58	Hurricane clips	No	60	
	<u>EAVES, VERGES, ETC</u>			
	Pressed fibre-cement:			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	45	
	Carried to Collection			
	SD4 - Waterborne			R
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	HINGES, BOLTS, ETC			
	100mm Chrome plated "D" type handle 3 by solid brace hinges			
	CATCHES,CABIN HOOKS, ETC			
63	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3	
	<u>LOCKS</u>			
	Approved			
64	Three lever mortice lock set	No	3	
65	Indicator lock set	No	3	
66	Security double throw dead lock (no latch)	No	3	
	<u>HANDLES, ETC.</u>			
	Aluminium Pull Handle			
67	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Item		
	<u>SUNDRIES</u>			
	Carried to Collection		R	
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No			Quantity	Rate	Amount
	ASSA ABLOY				
68	38mm Diameter rubber door stop plugged	No	3		
	Vaal Paragon				
69	32mm Type 9 back grab rail 800mm long plugged	No	1		
70	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	<u>LETTERS, NAMEPLATES, ETC</u>				
	Dorma:				
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		
	<u>BATHROOM FITTINGS</u>				
	Sundries				
	Kimberley-Clark or Similar				
75	SQ2 code 405607B white none lockable toilet roll holder	No	4		
	stainless Steel				
76	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	2		
77	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	1		
	Carried to Collection			R	
	SD4 - Waterborne				
	R MAHANGE & ASSOCIATES				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>WELDED SCREENS, GATES, ETC</u>			
	Gates to external doors			
78	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	1,2mm Double rebated frames suitable for half brick walls			
79	Frame for door size 813 x 2032mm high	No	3	
	1,2mm Double rebated frames suitable for one brick walls			
80	Frame for door size 813 x 2032mm high	No	2	
81	Frame for door size 914 x 2032mm high	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
	Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
82	Window type NE1, size 533 x 654mm high	No	8	
83	Window type NE7, size 1022 x 654mm high	No	3	
	Carried to Collection			R
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
	RAINWATER DISPOSAL			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	Aluminium Zinc Seamless Gutters			
87	100 x 100mm standard rainwater gutters fixed with gutter brackets	m	40	
88	Extra over eaves gutter for stopped end	No	4	
89	75 x 100mm Diameter rainwater down pipes fixed to wall	m	20	
90	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
91	Ditto .for shoe	No	4	
	<u>SANITARY FITTINGS</u>			
	"Vaal" or similar and approved			
92	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	3	
93	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	
	Carried to Collection			
	SD4 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
94	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	
95	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	3	
	PRECAST CONCRETE WASH HAND TROUGH			
96	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	
	Rainwater tank, etc.			
97	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No		
	<u>SOIL DRAINAGE</u>			
	uPVC pipes			
98	110mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
	Extra over uPVC pipes for fittings			
99	110mm Bend	No	5	
100	110mm Junction	No	5	
	uPVC gulleys			
101	110mm Gulley not exceeeding 750mm deep, includege excavations, pre-cast concrete sorround etc.	No	5	
	<u>WASTE UNIONS ETC</u>			
	Carried to Collection			
	SD4 - Waterborne			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	"Cobra Watertech"			
102	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	3	
	TRAPS ETC			
	"Cobra Watertech"			
103	Cobra Ref. 365/40" CP bottle trap	No	6	
	Marley			
104	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	3	
	TAPS, VALVES, ETC			
105	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	5	
106	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	
	<u>SANITARY PLUMBING</u>			
	uPVC pipes			
107	50mm Pipes	m	30	
	Extra over uPVC pipes for fittings			
108	50mm Bend	No	5	
109	50mm Access bend	No	5	
110	50mm Junction	No	5	
	Carried to Collection			R
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
<u>WATER SUPPLIES</u>				
Class 0 copper pipes				
111	15mm Pipes	m	10	
112	22mm Pipes	m	10	
Extra over class 0 copper pipes for capillary fittings				
113	15mm Fittings	No	5	
114	22mm Pipes	No	5	
SUNDRIES				
115	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	30	
116	Ditto, but in hard rock	m3	5	
117	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	5	
118	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	25	
TESTING				
119	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.		Item	
Carried to Collection				R
SD4 - Waterborne				
R MAHANGE & ASSOCIATES				

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Item No	Quantity	Rate	Amount
<p><u>SECTION NO.5</u></p> <p><u>BILL NO. 13</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p>PREPARATORY WORK TO EXISTING WORK</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>ON FIBRE-CEMENT</p> <p>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</p>			
122	On fascias and barge boards	m2	70
<p style="text-align: right;">Carried to Collection</p> <p>SD4 - Waterborne</p> <p>R MAHANGE & ASSOCIATES</p>			R

Item No		Quantity	Rate	Amount
	ON METAL			
	Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.			
123	On door frames m2	10		
	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			
124	On windows with burglar bars m2	15		
	1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)			
125	On gates (Measured over the full flat area of both sides) m2	20		
	ON WOOD			
	Under coat and minimum 2 coats gloss enamel, colour TBC			
126	On doors (External) m2	10		
127	On doors (Internal) m2	10		
	Carried to Collection		R	
	SD4 - Waterborne			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>WATER SUPPLY</u>			
	<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	230	
	<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	6	
8	50mm Threaded adaptor	No	6	
	<u>Galvanised medium steel pipes with screwed and socketed joints</u>			
9	50mm Pipes	m	230	
	<u>Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings</u>			
10	50mm Fittings	No	6	
11	50mm Bush	No	6	
12	50mm Elbow	No	6	
	Carried to Collection			
	External works		R	
	R MAHANGE & ASSOCIATES			

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Item No	Quantity	Rate	Amount
<u>WATER TANKS</u>			
<u>ELEVATED WATER TANKS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
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	5	
<u>Extra over trench and hole excavations in earth for excavation in</u>			
17	Soft rock m3	1	
18	Hard rock m3	1	
<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	2	
<u>Keeping excavations free of water.</u>			
21	Keeping excavations free of water.	Item	
<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density</u>			
22	Backfilling to trenches, holes, etc. m3	1	
Carried to Collection			
External works			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>Soil insecticide</u>			
23	To bottoms and sides of trenches, etc.	m2	3	
	<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>			
24	Under surface beds	m2	3	
	15Mpa/19mm Concrete			
25	Blinding	m3	1	
	<u>25Mpa/19mm Concrete</u>			
26	Bases	m3	2	
27	Platform surface beds cast in panels	m3	1	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
28	Platform surface beds	m2	3	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
29	On top of bases	m2	2	
	<u>"Jojo" or equal approved SANS PVC water tanks</u>			
30	5 000 Litre plastic water tank fitted onto and secured to tank platforms	No	1	
31	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No		
	<u>Galvanized medium normalized mild steel piping</u>			
	Carried to Collection		R	
	External works			
	R MAHANGE & ASSOCIATES			

Item No			Quantity	Rate	Amount
32	25mm Pipes	m	5		
33	50mm Pipes	m	4		
	<u>Extra over galvanised mild steel water supply pipes for fittings:</u>				
34	25mm Fittings.	No	4		
35	50mm Elbows.	No	4		
36	50mm Union.	No	6		
37	50mm Reducing bush.	No	6		
	<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	0.10		
42	40 x 40mm x 5mm angle	t	0.20		
43	125 x 75mm x 8mm unequal angle	t	0.10		
44	125 x 50mm x 20 x 2mm Lipped channel	t	0.20		
	<u>BOLTS, FASTENERS, ETC. (LI)</u>				
45	High tensile bolts	t	0.10		
	Carried to Collection				
	External works			R	
	R MAHANGE & ASSOCIATES				

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Item No		Quantity	Rate	Amount
	<u>STAND PIPES</u>			
	<u>SEPTIC TANK AND FRENCH DRAINS</u>			
	<u>SEPTIC TANKS, ETC.</u>			
	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		
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
50	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	100	
	<u>EXCAVATION, FILLING, ETC.</u>			
	<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>			
51	Holes	m3	110	
	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	35	
	<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	60	
	Carried to Collection			
	External works			R
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<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		
	<u>REINFORCED CONCRETE</u>			
	<u>15MPa/19mm concrete</u>			
56	15Mpa in blinding	m3	2	
	<u>25MPa/19mm concrete</u>			
57	25Mpa in base	m3	10	
58	25Mpa in slab over septic tank	m3	5	
59	Concrete haunch formed below pipes	m3	1	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
60	Surface beds, slabs, etc. to falls	m2	25	
	<u>Permanent formwork to soffits</u>			
61	Slab over septic tank	m2	25	
	Smooth formwork to form			
62	Opening not exceeding 1m girth through 170mm slab	No	4	
	Carried to Collection			
	External works			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>			
	<u>Smooth formwork to sides</u>			
63	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25	
	<u>REINFORCEMENT</u>			
	<u>Fabric reinforcement</u>			
64	Type 888 fabric reinforcement in concrete surface beds, slabs, etc	m2	40	
	<u>MASONRY</u>			
	<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	200	
	<u>Face bricks (purchase price of R5 000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
67	Extra over brickwork for face brickwork in foundation	m2	10	
	<u>BRICKWORK SUNDRIES</u>			
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	
	<u>PLASTERING</u>			
	<u>Watertight cement plaster on brickwork</u>			
	Carried to Collection		R	
	External works			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>FRENCH DRAINS</u>			
	<u>SITE CLEARANCE ETC.</u>			
	<u>Site clearance</u>			
77	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	20	
	<u>EXCAVATION, FILLING, ETC.</u>			
	<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>			
	Carried to Collection			R
	External works			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
84	On top of french drain as soil cover	m3	10	
	<u>FILTER FABRIC</u>			
	<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	
	<u>WATERPROOFING</u>			
	<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	
	<u>ROOF SHEETING</u>			
	<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	
	Carried to Collection			
	External works			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>WATER HARVESTING TANKS</u>			
	<u>WATER TANKS</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
94	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	60	
	<u>EXCAVATION, FILLING, ETC.</u>			
	<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	3	
	<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	25	
	<u>Keeping excavations free of water</u>			
100	Keeping excavations free of all water other than subterranean water	Item		
	Carried to Collection			
	External works			
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
103	Strip footings m3	10		
104	Platform surface beds cast in panels m3	5		
	<u>FINISHING TOP SURFACE OF CONCRETE</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>			
105	Surface beds, slabs, etc (rainwater tanks) m2	20		
	<u>REINFORCEMENT</u>			
	<u>Fabric reinforcement</u>			
106	Type 295 fabric reinforcement in concrete surface beds, slabs, etc m2	20		
	<u>TEST CUBES</u>			
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		
	<u>BRICKWORK</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
108	One brick walls m2	10		
	Carried to Collection		R	
	External works			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brickwork reinforcement</u>			
109	150mm Wide reinforcement built in horizontally	m	40	
	<u>FACE BRICKWORK</u>			
	<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	20	
	<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	40	
	<u>WATERPROOFING</u>			
	<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	20	
	<u>WATER SUPPLIES</u>			
	<u>"Jojo" approved SANS PVC water tanks</u>			
113	2500 Litre plastic water tank fitted onto and secured to tank platforms	No	3	
	<u>Galvanized medium normalized mild steel piping</u>			
114	25mm Pipes	m	5	
	Carried to Collection			
	External works			R
	R MAHANGE & ASSOCIATES			

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Item No		Quantity	Rate	Amount
	<u>PAVED WALKWAYS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	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	250	
118	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	250	
	<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	80	
	<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	80	
	<u>Earth filling supplied by the contractor under parking areas, roadways, etc</u>			
121	Sub-base course of G5 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density	m3	50	
	<u>Compaction of surfaces</u>			
	Carried to Collection			
	External works			
	R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
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	210	
	<u>Soil poisoning</u>			
123	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasion 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 ² on cleared ground	m2	210	
	<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	210	
125	Fig. 12 kerbs to sides of paving	m	300	
126	15Mpa/19mm unreinforced concrete in haunching	m3	40	
Carried to Collection				R
External works				
R MAHANGE & ASSOCIATES				

Item No	Quantity	Rate	Amount
<u>STORMWATER CONTROL</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
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	500
128	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, paving, etc.	m3	100
129	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	40
130	Extra over trench or hole for excavations in soft rock	m3	20
131	Extra over trench or hole for excavations in hard rock	m3	20
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	500
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	500
<u>Reinforced Concrete</u>			
Carried to Collection			R
External works			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
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	30	
135	Extra for fair open end	No	6	
136	Extra for fair stopped end	No	6	
137	Extra for angle intersection	No	5	
Carried to Collection				R
External works				
R MAHANGE & ASSOCIATES				

Item No	Quantity	Rate	Amount
<u>FENCING AROUND TANK STANDS</u>			
<u>FENCING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>Welded mesh fence</u>			
138			
<u>Panels:</u> 1.80m x 3.0m			
<u>Palings 'DevilFork':</u> 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.			
<u>Fence bearers:</u> 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			
<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			
	m	1 205	
Carried to Collection			R
External works			
R MAHANGE & ASSOCIATES			

Item No		Quantity	Rate	Amount
139	<p><u>Posts:</u></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	405	
140	<p><u>Palisade Gates</u></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	
Carried to Collection				R
External works				
R MAHANGE & ASSOCIATES				

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