

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>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>			
	Carried Forward		R	
	P's and G's			
	R MAHANGE & ASSOCIATESS			

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	<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 style="text-align: right;">m</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><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Definitions (A1)</u></p> <p>Definitions and interpretation (clause 1)</p> <p>F:..... V:..... T:.....</p> <p style="text-align: right;">Item</p> <p><u>Objective and Preparation (A2 to A14)</u></p> <p>Offer acceptance and performance (clause 2)</p>		
	Carried Forward		R
	P's and G's		
	R MAHANGE & ASSOCIATES		

Brought Forward				R
F:..... V:..... T:..... Documents (clause 3)	Item			
F:..... V:..... T:..... Design responsibility (clause 4)	Item			
F:..... V:..... T:..... Employer's agents (clause 5)	Item			
F:..... V:..... T:..... The principal agent shall: - monitor and control progress and scheduling - monitor all contract conditions, and - coordinate the efforts of the employer's agents, the contractor and subcontractors The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part	Item			
Carried Forward				R
P's and G's R MAHANGE & ASSOCIATESS				

Brought Forward			R	
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)				
F:..... V:..... T:.....	Item			
Effecting insurance (clause 12)				
F:..... V:..... T:.....	Item			
NO CLAUSE (Clause 13)				
Security (clause 14)				
Carried Forward			R	
P's and G's				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
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		
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		
Carried Forward			R
P's and G's			
R MAHANGE & ASSOCIATESS			

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Brought Forward		
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	
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	
Carried Forward		R
P's and G's		
R MAHANGE & ASSOCIATESS		

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Brought Forward		
The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion		
The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account		
Payment to other parties (clause 35)		
F:..... V:..... T:.....	Item	
<u>Cancellation (A36-A39)</u>		
Cancellation by employer - contractor's default (clause 36)		
F:..... V:..... T:.....	Item	
Cancellation by employer - loss and damage (clause 37)		
F:..... V:..... T:.....	Item	
Cancellation by contractor - employer's default (clause 38)		
F:..... V:..... T:.....	Item	
Cancellation - cessation of the works (clause 39)		
F:..... V:..... T:.....	Item	
Carried Forward		R
P's and G's		
R MAHANGE & ASSOCIATESS		

	Brought Forward	
<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 N/A</p> <p>42.2.9 The law applicable to this agreement shall be that of</p>	R	
<p style="text-align: right;">Carried Forward</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATESS</p>	R	

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

Brought Forward			R
F:..... V:..... T:..... Interests of agents (B2.4)	Item		
F:..... V:..... T:..... Priced documents (B2.5)	Item		
F:..... V:..... T:..... Tender submission (B2.6)	Item		
F:..... V:..... T:..... Defined works area (B3.1)	Item		
F:..... V:..... T:..... <u>The site (B3)</u>			
Geotechnical investigation (B3.2)			
F:..... V:..... T:..... Inspection of the site (B3.3)	Item		
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.			
Previous work - dimensional accuracy (B3.5)			
F:..... V:..... T:.....	Item		
Carried Forward			R
P's and G's			
R MAHANGE & ASSOCIATESS			

Brought Forward		R
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	
<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)		
Carried Forward		R
P's and G's		
R MAHANGE & ASSOCIATESS		

Brought Forward				R
F:..... V:..... T:..... Subcontractors' notice board (B6.6)	Item			
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)				
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			
Carried Forward				R
P's and G's				
R MAHANGE & ASSOCIATESS				

Brought Forward			R	
<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			
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			
Carried Forward			R	
P's and G's				
R MAHANGE & ASSOCIATESS				

Brought Forward			R	
Tenant Installations (B11.12)				
F:..... V:..... T:.....	Item			
<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 Forward			R	
P's and G's				
R MAHANGE & ASSOCIATES				

Brought Forward	R
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)	
12.1.21 Special attendance (B9.2)	
Subcontractor (1) details: N/A	
12.1.22 Protection of the works (B11.1)	
Carried Forward	R
P's and G's	
R MAHANGE & ASSOCIATESS	

	Brought Forward			R
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				
<u>Site instructions</u>				
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				
Carried Forward				
P's and G's				R
R MAHANGE & ASSOCIATESS				

		R
Brought Forward		
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		
Guarantees		
F:..... V:..... T:.....	Item	
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		
Overtime		
F:..... V:..... T:.....	Item	
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		
Co-operation of contractor for cost management		
F:..... V:..... T:.....	Item	
Carried Forward		
P's and G's		R
R MAHANGE & ASSOCIATESS		

Brought Forward		R
<p>It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors</p> <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)</p> <p>It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document.</p> <p>The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p>	Item	
Carried Forward		R
<p>P's and G's</p> <p>R MAHANGE & ASSOCIATESS</p>		

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

Brought Forward			R	
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of SANS approved ear defenders				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of face masks (Covid -19)				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of face shields (Covid-19)				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of gloves (Covid-19)				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid-19)				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)				
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item			
Carried Forward			R	
P's and G's				
R MAHANGE & ASSOCIATESS				

Brought Forward			R	
Provision of digital infra red non-contact body thermometer (Covid-19, minimum of two per site entrance)				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Provision of perspex screens for office staff (Covid-19, minimum size 600 x 500mm)				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Provision of signage, including Covid-19 related signage				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Provision of full time construction health and safety officer (SACPCMP Registered)				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Medical screenings, examinations, etc. in terms of Covid-19 regulations				
Provision of personal protective equipment (PPE)				
F:..... V:..... T:.....	Item			
Carried Forward			R	
P's and G's				
R MAHANGE & ASSOCIATES				

Brought Forward		R
Induction training, including Covid-19 training		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of first aid boxes to GSR requirements		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Noise monitoring including establishment of noise zones (plant), audio grams (personnel), etc.		
F:..... V:..... T:.....	Item	
Submission of health and safety file		
HIV/AIDS Awareness		
F:..... V:..... T:.....	Item	
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.		
Carried Forward		R
P's and G's		
R MAHANGE & ASSOCIATESS		

Brought Forward

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.

SUMMARY OF CATEGORIES

Category : Fixed R.....

Category : Value R.....

Category : Time
R.....

R

Carried to Summary

P's and G's

R MAHANGE & ASSOCIATESS

R

Item No	Quantity	Rate	Amount
<p><u>Section No. 2</u></p>			
<p><u>DEMOLITIONS AND ALTERATIONS</u></p>			
<p><u>ALTERATIONS</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>View Site</u></p>			
<p><u>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.</u></p>			
<p><u>Explosives</u></p>			
<p><u>No explosives whatsoever may be used for demolition.</u></p>			
<p><u>General</u></p>			
<p><u>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.</u></p>			
<p>Carried Forward</p>			
<p>Alterations</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

<p style="text-align: center;">Brought Forward</p> <p><u>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.</u></p> <p><u>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehangng, 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. Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc. Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing. 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.</u></p> <p><u>DEMOLITIONS AND ALTERATIONS</u></p>	<p>R</p>
<p style="text-align: center;">Carried Forward</p> <p>Alterations</p> <p>R MAHANGE & ASSOCIATESS</p>	<p>R</p>

Brought Forward					
<u>DEMOLITIONS OF EXISTING TOILET STRUCTURES</u>				R	
<u>Demolish existing blocks as indicated on the site development plan including cartying away rubbles to a tip to be found by the Contractor as follows:</u>					
1	Demolish existing block marked 1: Female staff waterborne toilet including hacking up and removing foundations and surface beds, doors, windows, and door frames, ironmongery and plumbing fittings complete.	No	1		
<u>Refurbishment of existing blocks</u>					
2	Refurbish existing waterborne block 1 including new doors, ironmongery sanitary fittings, plaster & paint, tilling, roofing & fascia boards to be treated to match traffic green specification. Consider air bricks for ventilation , high & low	No	2		
3	Refurbish existing waterborne block 2 including new doors, ironmongery sanitary fittings, plaster & paint, tilling, roofing & fascia boards to be treated to match traffic green specification. Consider air bricks for ventilation , high & low	No	2		
4	Refurbish existing waterborne block 3 including new doors, ironmongery sanitary fittings, plaster & paint, tilling, roofing & fascia boards to be treated to match traffic green specification. Consider air bricks for ventilation , high & low	No	2		
Carried to Summary				R	
Alterations					
R MAHANGE & ASSOCIATESS					

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><u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Carting away of excavated material</u></p>			
<p><u>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</u></p>			
<p><u>Filling</u></p>			
<p>Carried Forward</p>			
<p>SD12 - Waterborne</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

Brought Forward			R
<u>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</u>			
<u>Soil poisoning</u>			
<u>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</u>			
<u>SITE CLEARANCE ETC</u>			
<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	130
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	130
<u>EXCAVATION, FILLING, ETC</u>			
<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	30
4	Thickening under aprons	m3	5
<u>Extra over trench and hole excavations in earth for excavation in</u>			
5	Soft rock	m3	10
6	Hard rock	m3	5
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Extra over all excavations for carting away</u>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	40
<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	75
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving, etc	m3	10
11	Backfilling to trenches, holes, etc	m3	10
<u>Compaction of surfaces</u>			
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	115
<u>Under floors, steps, paving, etc.</u>			
<u>Prescribed density tests on filling</u>			
13	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
<u>Weedkiller mixed in accordance to supplier's specifications</u>			
14	To bottoms and sides of trenches, etc.	m2	120
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	125
	<u>Soil insecticide</u>		
16	To bottoms and sides of trenches etc	m2	120
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	125
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>UNREINFORCED CONCRETE, ETC.</u>			
<u>15MPa/19mm concrete</u>			
18	Surface blinding under footings and bases	m3	5
<u>25MPa/19mm concrete</u>			
19	Strip footings	m3	10
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm concrete</u>			
20	Surface beds and apron	m3	15
21	Extra over for thickening in pits or apron for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	55
<u>TEST CUBES</u>			
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	5.0
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>			
23	Surface beds, slabs, etc	m2	115
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>			
<u>Smooth formwork to sides</u>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	55
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Mild steel reinforcement to structural concrete work</u>			
25	8mm Diameter bars	t	1.00
26	10mm Diameter bars	t	1.00
<u>Fabric Reinforcement</u>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	65
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward				R
<u>SECTION NO.3</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>BRICKWORK</u>				
<u>Sizes in descriptions</u>				
<u>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</u>				
<u>Face bricks</u>				
<u>Bricks shall be ordered timeously to obtain uniformity in size and colour</u>				
<u>Pointing</u>				
<u>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</u>				
<u>FOUNDATIONS (PROVISIONAL)</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
28	One brick walls	m2	35	
29	Half brick walls	m2	25	
<u>FACE BRICKWORK</u>				
Carried Forward				R
SD12 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
30	Extra over brickwork for face brickwork	m2	10
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
31	Half brick walls in beamfilling .	m2	15
32	Half brickwall in superstructure	m2	65
33	One brick walls	m2	140
<u>FACE BRICKWORK</u>			
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
34	Extra over brickwork for face brickwork	m2	150
<u>Section No. 3</u>			
<u>BUILDING</u>			
<u>Bill No. 4</u>			
<u>MASONRY</u>			
<u>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</u>			
35	Extra over brickwork for brick-on-edge header course lintel	m	20
36	110mm Wide sill set level and slightly projecting	m	20
37	220mm Wide sill set sloping and slightly protecting outside	m	20
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	15
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
40	75mm Wide reinforcement built in horizontally	m	360
41	150mm Wide reinforcement built in horizontally	m	695
<u>Galvanised wire ties etc</u>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	40
<u>Turning pieces to lintels etc.</u>			
43	115mm Wide turning pieces	m	15
44	230mm Wide turning pieces	m	5
<u>Prestressed fabricated lintels</u>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<u>Air bricks etc.</u>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	25
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
47	In walls	m2	15
<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
48	Under surface beds	m2	115
<u>FLOOR AND WALL SEALERS</u>			
<u>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</u>			
49	Around steel windows and door frames	m	140
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
50	Roof covering with pitch not exceeding 25 degrees	m2	90
<u>ROOF AND WALL INSULATION</u>			
51	12" Thermal resistance insulation laid on purlins	m2	90
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>ROOFS, ETC.</u>			
<u>Sawn softwood grade 6</u>			
52	76 x 38mm Wall plates	m	40
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	95
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	115
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	
<u>Sundries</u>			
56	Two coats creosote on sawn timbers	m2	65
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	125
58	Hurricane clips	No	125
<u>EAVES, VERGES, ETC</u>			
<u>Pressed fibre-cement:</u>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	50
<u>DOORS, ETC</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	4
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	12
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>HINGES, BOLTS, ETC</u>			
<u>100mm Chrome plated "D" type handle 3 by solid brace hinges</u>			
<u>CATCHES,CABIN HOOKS, ETC</u>			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4
<u>LOCKS</u>			
<u>Approved</u>			
63	Three lever mortice lock set	No	4
64	Indicator lock set	No	12
65	Security double throw dead lock (no latch)	No	4
<u>HANDLES, ETC.</u>			
<u>Aluminium Pull Handle</u>			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	No	1
<u>SUNDRIES</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>ASSA ABLOY</u>			
67	38mm Diameter rubber door stop plugged	No	4
<u>Vaal Paragon</u>			
68	32mm Type 9 back grab rail 800mm long plugged	No	1
69	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Dorma:</u>			
70	DSS-130 Engraved "Male" information sign, plugged	No	1
71	DSS-131 Engraved "Female" information sign, plugged	No	1
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	1
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>Sundries</u>			
<u>Kimberley-Clark or Similar</u>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	13
<u>stainless Steel</u>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	9
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	9
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Gates to external doors</u>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	4
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
78	Frame for door size 813 x 2032mm high	No	12
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
79	Frame for door size 813 x 2032mm high	No	4
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
80	Window type NE1, size 533 x 654mm high	No	16
81	Window type NE7, size 1022 x 654mm high	No	7
<u>Sundries</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>GRANOLITHIC</u>			
<u>Untinted granolithic on concrete</u>			
83	20mm Thick on floors	m2	65
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
84	On internal plastered walls	m2	275
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
<u>RAINWATER DISPOSAL</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>Aluminium Zinc Seamless Gutters</u>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	20
86	Extra over eaves gutter for stopped end	No	4
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	15
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4
89	Ditto .for shoe	No	4
<u>SANITARY FITTINGS</u>			
<u>"Vaal" or similar and approved</u>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	9
91	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	12
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
92	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
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	3
<u>PRECAST CONCRETE WASH HAND TROUGH</u>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<u>Rainwater tank, etc.</u>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	2
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	125
<u>Extra over uPVC pipes for fittings</u>			
97	110mm Bend	No	12
98	110mm Junction	No	12
<u>uPVC gulleys</u>			
99	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
<u>WASTE UNIONS ETC</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>"Cobra Watertech"</u>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	9
<u>TRAPS ETC</u>			
<u>"Cobra Watertech"</u>			
101	Cobra Ref. 365/40" CP bottle trap	No	9
<u>Marley</u>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
<u>TAPS, VALVES, ETC</u>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	9
104	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	9
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
105	50mm Pipes	m	85
<u>Extra over uPVC pipes for fittings</u>			
106	50mm Bend	No	15
107	50mm Access bend	No	15
108	50mm Junction	No	15
<u>WATER SUPPLIES</u>			
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Class 0 copper pipes</u>			
109	15mm Pipes	m	75
110	22mm Pipes	m	90
<u>Extra over class 0 copper pipes for capillary fittings</u>			
111	15mm Fittings	No	60
112	22mm Pipes	No	30
<u>SUNDRIES</u>			
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	5
114	Ditto, but in hard rock	m3	1
115	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
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	1
<u>TESTING</u>			
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.		Item
Carried Forward			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

	Brought Forward			R
	<u>SECTION NO.3</u>			
	<u>BILL NO. 13</u>			
	<u>PAINTWORK</u>			
	<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	<u>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</u>			
	<u>Previously painted metal surfaces</u>			
	<u>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</u>			
	<u>Previously painted wood surfaces</u>			
	<u>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</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
119	On fascias and barge boards	m2	25	
	Carried Forward			R
	SD12 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>ON METAL</u>			
<u>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</u>			
120	On door frames	m2	25
<u>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</u>			
121	On windows with burglar bars	m2	15
<u>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</u>			
122	On gates (Measured over the full flat area of both sides)	m2	15
<u>ON WOOD</u>			
<u>Under coat and minimum 2 coats gloss enamel, colour TBC</u>			
123	On doors (External)	m2	15
124	On doors (Internal)	m2	40
<u>Section No. 3</u>			
<u>BUILDING</u>			
<u>Bill No. 13</u>			
<u>PAINTWORK</u>			
<u>Section No. 3</u>			
<u>BUILDING</u>			
<u>SECTION SUMMARY - BUILDING</u>			
Carried to Summary			R
SD12 - Waterborne			
R MAHANGE & ASSOCIATESS			

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><u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Carting away of excavated material</u></p>			
<p><u>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</u></p>			
<p><u>Filling</u></p>			
<p>Carried Forward</p>			
<p>F10 - Waterborne</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

Brought Forward			R
<p><u>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</u></p>			
<p><u>Soil poisoning</u></p>			
<p><u>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</u></p>			
<p><u>SITE CLEARANCE ETC</u></p>			
<p><u>Site clearance</u></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	85
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	85
<p><u>EXCAVATION, FILLING, ETC</u></p>			
<p><u>Excavation in earth not exceeding 2m deep</u></p>			
3	Trenches	m3	20
4	Thickening under aprons	m3	5
<p><u>Extra over trench and hole excavations in earth for excavation in</u></p>			
5	Soft rock	m3	5
6	Hard rock	m3	3
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Extra over all excavations for carting away</u>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	40
<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	45
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving, etc	m3	5
11	Backfilling to trenches, holes, etc	m3	10
<u>Compaction of surfaces</u>			
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	70
<u>Under floors, steps, paving, etc.</u>			
<u>Prescribed density tests on filling</u>			
13	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
<u>Weedkiller mixed in accordance to supplier's specifications</u>			
14	To bottoms and sides of trenches, etc.	m2	70
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.4</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>UNREINFORCED CONCRETE, ETC.</u>			
<u>15MPa/19mm concrete</u>			
18	Surface blinding under footings and bases	m3	3
<u>25MPa/19mm concrete</u>			
19	Strip footings	m3	5
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm concrete</u>			
20	Surface beds and apron	m3	10
21	Extra over for thickening in pits or apron for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	40
<u>TEST CUBES</u>			
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	5.0
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATES			

	Brought Forward			R
	<u>SECTION NO.4</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	<u>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</u>			
	<u>Face bricks</u>			
	<u>Bricks shall be ordered timeously to obtain uniformity in size and colour</u>			
	<u>Pointing</u>			
	<u>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</u>			
	<u>FOUNDATIONS (PROVISIONAL)</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
28	One brick walls	m2	20	
	<u>FACE BRICKWORK</u>			
	Carried Forward			R
	F10 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
29	Extra over brickwork for face brickwork	m2	5
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
30	Half brick walls in beamfilling .	m2	10
31	Half brickwall in superstructure	m2	50
32	One brick walls	m2	90
<u>FACE BRICKWORK</u>			
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
33	Extra over brickwork for face brickwork	m2	100
<u>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</u>			
34	Extra over brickwork for brick-on-edge header course lintel	m	10
35	110mm Wide sill set level and slightly projecting	m	10
36	220mm Wide sill set sloping and slightly protecting outside	m	10
37	Fair cutting fitting around pipe not exceeding 100mm	No	6
38	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10
<u>BRICKWORK SUNDRIES</u>			
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Brickwork reinforcement</u>			
39	75mm Wide reinforcement built in horizontally	m	240
40	150mm Wide reinforcement built in horizontally	m	435
<u>Galvanised wire ties etc</u>			
41	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	24
<u>Turning pieces to lintels etc.</u>			
42	115mm Wide turning pieces	m	15
43	230mm Wide turning pieces	m	5
<u>Prestressed fabricated lintels</u>			
44	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<u>Air bricks etc.</u>			
45	230 x 152mm terra-cotta vermin proofed louvered air brick	No	15
<u>SECTION NO.4</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.4</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
49	Roof covering with pitch not exceeding 25 degrees	m2	55
<u>ROOF AND WALL INSULATION</u>			
50	12" Thermal resistance sisalation laid on purlins	m2	55
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward				R
<u>SECTION NO.4</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>				
<u>ROOFS, ETC.</u>				
<u>Sawn softwood grade 6</u>				
51	76 x 38mm Wall plates	m	25	
52	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	55	
53	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	65	
54	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	55	
<u>Sundries</u>				
55	Two coats creosote on sawn timbers	m2	40	
56	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	70	
57	Hurricane clips	No	70	
<u>EAVES, VERGES, ETC</u>				
<u>Pressed fibre-cement:</u>				
58	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	35	
<u>DOORS, ETC</u>				
Carried Forward				R
F10 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward		R
<u>SECTION NO.4</u>		
<u>BILL NO. 7</u>		
<u>IRONMONGERY</u>		
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>		
<u>HINGES, BOLTS, ETC</u>		
<u>100mm Chrome plated "D" type handle 3 by solid brace hinges</u>		
<u>CATCHES,CABIN HOOKS, ETC</u>		
61	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2
<u>LOCKS</u>		
<u>Approved</u>		
62	Three lever mortice lock set	No 2
63	Indicator lock set	No 10
64	Security double throw dead lock (no latch)	No 2
<u>HANDLES, ETC.</u>		
<u>Aluminium Pull Handle</u>		
65	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	No
<u>SUNDRIES</u>		
Carried Forward		R
F10 - Waterborne		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
<u>ASSA ABLOY</u>			
66	38mm Diameter rubber door stop plugged	No	2
<u>Vaal Paragon</u>			
67	32mm Type 9 back grab rail 800mm long plugged	No	
68	32mm Type 8 side grab rail 900mm girth plugged	No	
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Dorma:</u>			
69	DSS-130 Engraved "Male" information sign, plugged	No	
70	DSS-131 Engraved "Female" information sign, plugged	No	2
71	DSS-132 Engraved "Male/Female" information sign, plugged	No	
72	DSS-133 Engraved "Disabled" information sign, plugged	No	
<u>BATHROOM FITTINGS</u>			
<u>Sundries</u>			
<u>Kimberley-Clark or Similar</u>			
73	SQ2 code 405607B white none lockable toilet roll holder	No	10
<u>stainless Steel</u>			
74	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
75	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	10
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.4</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Gates to external doors</u>			
76	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>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
77	Frame for door size 813 x 2032mm high	No	10
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
78	Frame for door size 813 x 2032mm high	No	2
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
79	Window type NE1, size 533 x 654mm high	No	10
80	Window type NE7, size 1022 x 654mm high	No	4
<u>Sundries</u>			
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.4</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>GRANOLITHIC</u>			
<u>Untinted granolithic on concrete</u>			
82	20mm Thick on floors	m2	35
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
83	On internal plastered walls	m2	180
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.4</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
<u>RAINWATER DISPOSAL</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>Aluminium Zinc Seamless Gutters</u>			
84	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	10
85	Extra over eaves gutter for stopped end	No	2
86	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
87	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
88	Ditto .for shoe	No	2
<u>SANITARY FITTINGS</u>			
<u>"Vaal" or similar and approved</u>			
89	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
90	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	10
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
91	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
<u>PRECAST CONCRETE WASH HAND TROUGH</u>			
92	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<u>Rainwater tank, etc.</u>			
93	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
94	110mm Pipes laid in and including trenches not exceeding 1m deep	m	96
<u>Extra over uPVC pipes for fittings</u>			
95	110mm Bend	No	10
96	110mm Junction	No	10
<u>uPVC gulleys</u>			
97	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	2
<u>WASTE UNIONS ETC</u>			
<u>"Cobra Watertech"</u>			
98	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	6
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>TRAPS ETC</u>			
<u>"Cobra Watertech"</u>			
99	Cobra Ref. 365/40" CP bottle trap	No	6
<u>Marley</u>			
100	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
<u>TAPS, VALVES, ETC</u>			
101	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	6
102	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	6
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
103	50mm Pipes	m	70
<u>Extra over uPVC pipes for fittings</u>			
104	50mm Bend	No	12
105	50mm Access bend	No	15
106	50mm Junction	No	15
<u>WATER SUPPLIES</u>			
<u>Class 0 copper pipes</u>			
107	15mm Pipes	m	75
108	22mm Pipes	m	90
Carried Forward			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward				R
<u>Extra over class 0 copper pipes for capillary fittings</u>				
109	15mm Fittings	No	60	
110	22mm Pipes	No	30	
<u>SUNDRIES</u>				
111	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	4	
112	Ditto, but in hard rock	m3	1	
113	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	3	
114	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	1	
<u>TESTING</u>				
115	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item
Carried Forward				R
F10 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward

R

SECTION NO.4

BILL NO. 13

PAINTWORK

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

PAINTWORK ETC TO NEW WORK

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

117

On fascias and barge boards

m2

15

Carried Forward

R

F10 - Waterborne

R MAHANGE & ASSOCIATES

Brought Forward			R
<u>ON METAL</u>			
<u>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</u>			
118	On door frames	m2	15
<u>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</u>			
119	On windows with burglar bars	m2	10
<u>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</u>			
120	On gates (Measured over the full flat area of both sides)	m2	10
<u>ON WOOD</u>			
<u>Under coat and minimum 2 coats gloss enamel, colour TBC</u>			
121	On doors (External)	m2	10
122	On doors (Internal)	m2	35
Carried to Summary			R
F10 - Waterborne			
R MAHANGE & ASSOCIATESS			

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><u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Carting away of excavated material</u></p>			
<p><u>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</u></p>			
<p><u>Filling</u></p>			
<p>Carried Forward</p>			
<p>MD4 - Waterborne</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

Brought Forward			R
<p><u>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</u></p>			
<p><u>Soil poisoning</u></p>			
<p><u>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</u></p>			
<p><u>SITE CLEARANCE ETC</u></p>			
<p><u>Site clearance</u></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	80
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	80
<p><u>EXCAVATION, FILLING, ETC</u></p>			
<p><u>Excavation in earth not exceeding 2m deep</u></p>			
3	Trenches	m3	15
4	Thickening under aprons	m3	5
<p><u>Extra over trench and hole excavations in earth for excavation in</u></p>			
5	Soft rock	m3	5
6	Hard rock	m3	2
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Extra over all excavations for carting away</u>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	35
<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	45
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving, etc	m3	5
11	Backfilling to trenches, holes, etc	m3	10
<u>Compaction of surfaces</u>			
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	60
<u>Under floors, steps, paving, etc.</u>			
<u>Prescribed density tests on filling</u>			
13	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
<u>Weedkiller mixed in accordance to supplier's specifications</u>			
14	To bottoms and sides of trenches, etc.	m2	65
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	60
<u>Soil insecticide</u>			
16	To bottoms and sides of trenches etc	m2	65
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	60
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>UNREINFORCED CONCRETE, ETC.</u>			
<u>15MPa/19mm concrete</u>			
18	Surface blinding under footings and bases	m3	1
<u>25MPa/19mm concrete</u>			
19	Strip footings	m3	5
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm concrete</u>			
20	Surface beds and apron	m3	10
21	Extra over for thickening in pits or apron for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	35
<u>TEST CUBES</u>			
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
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATES			

	Brought Forward			R
	<u>SECTION NO.5</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	<u>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</u>			
	<u>Face bricks</u>			
	<u>Bricks shall be ordered timeously to obtain uniformity in size and colour</u>			
	<u>Pointing</u>			
	<u>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</u>			
	<u>FOUNDATIONS (PROVISIONAL)</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
28	One brick walls	m2	20	
	<u>FACE BRICKWORK</u>			
	Carried Forward			R
	MD4 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
29	Extra over brickwork for face brickwork	m2	5
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
30	Half brick walls in beamfilling .	m2	10
31	Half brickwall in superstructure	m2	30
32	One brick walls	m2	75
<u>FACE BRICKWORK</u>			
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
33	Extra over brickwork for face brickwork	m2	85
<u>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</u>			
34	Extra over brickwork for brick-on-edge header course lintel	m	10
35	110mm Wide sill set level and slightly projecting	m	15
36	220mm Wide sill set sloping and slightly protecting outside	m	10
37	Fair cutting fitting around pipe not exceeding 100mm	No	11
38	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	11
<u>BRICKWORK SUNDRIES</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Brickwork reinforcement</u>			
39	75mm Wide reinforcement built in horizontally	m	240
40	150mm Wide reinforcement built in horizontally	m	380
<u>Galvanised wire ties etc</u>			
41	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	22
<u>Turning pieces to lintels etc.</u>			
42	115mm Wide turning pieces	m	15
43	230mm Wide turning pieces	m	5
<u>Prestressed fabricated lintels</u>			
44	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10
<u>Air bricks etc.</u>			
45	230 x 152mm terra-cotta vermin proofed louvered air brick	No	20
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
46	In walls	m2	10
<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
47	Under surface beds	m2	55
<u>FLOOR AND WALL SEALERS</u>			
<u>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</u>			
48	Around steel windows and door frames	m	55
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
49	Roof covering with pitch not exceeding 25 degrees	m2	45
<u>ROOF AND WALL INSULATION</u>			
50	12" Thermal resistance sisalation laid on purlins	m2	45
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>ROOFS, ETC.</u>			
<u>Sawn softwood grade 6</u>			
51	76 x 38mm Wall plates	m	20
52	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	45
53	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	60
<u>Sundries</u>			
54	Two coats creosote on sawn timbers	m2	30
55	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	60
56	Hurricane clips	No	60
<u>EAVES, VERGES, ETC</u>			
<u>Pressed fibre-cement:</u>			
57	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	30
<u>DOORS, ETC</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
58	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	2
59	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	4
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward		R
<u>SECTION NO.5</u>		
<u>BILL NO. 7</u>		
<u>IRONMONGERY</u>		
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>		
<u>HINGES, BOLTS, ETC</u>		
<u>100mm Chrome plated "D" type handle 3 by solid brace hinges</u>		
<u>CATCHES,CABIN HOOKS, ETC</u>		
60	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2
<u>LOCKS</u>		
<u>Approved</u>		
61	Three lever mortice lock set	No 2
62	Indicator lock set	No 4
63	Security double throw dead lock (no latch)	No 2
<u>HANDLES, ETC.</u>		
<u>Aluminium Pull Handle</u>		
64	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	No
<u>SUNDRIES</u>		
Carried Forward		R
MD4 - Waterborne		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
<u>ASSA ABLOY</u>			
65	38mm Diameter rubber door stop plugged	No	2
<u>Vaal Paragon</u>			
66	32mm Type 9 back grab rail 800mm long plugged	No	1
67	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Dorma:</u>			
68	DSS-130 Engraved "Male" information sign, plugged	No	1
69	DSS-131 Engraved "Female" information sign, plugged	No	
70	DSS-132 Engraved "Male/Female" information sign, plugged	No	
71	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>Sundries</u>			
<u>Kimberley-Clark or Similar</u>			
72	SQ2 code 405607B white none lockable toilet roll holder	No	5
<u>stainless Steel</u>			
73	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	2
74	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Gates to external doors</u>			
75	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>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
76	Frame for door size 813 x 2032mm high	No	4
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
77	Frame for door size 813 x 2032mm high	No	2
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
78	Window type NE1, size 533 x 654mm high	No	7
79	Window type NE7, size 1022 x 654mm high	No	3
<u>Sundries</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

		Brought Forward		R
	<u>Cage, etc</u>			
80	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No		
		Carried Forward		R
	MD4 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>GRANOLITHIC</u>			
<u>Untinted granolithic on concrete</u>			
81	20mm Thick on floors	m2	30
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
82	On internal plastered walls	m2	115
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
<u>RAINWATER DISPOSAL</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>Aluminium Zinc Seamless Gutters</u>			
83	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	10
84	Extra over eaves gutter for stopped end	No	2
85	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
86	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
87	Ditto .for shoe	No	2
<u>SANITARY FITTINGS</u>			
<u>"Vaal" or similar and approved</u>			
88	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	1
89	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	4
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
90	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
91	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	4
<u>PRECAST CONCRETE WASH HAND TROUGH</u>			
92	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
<u>Rainwater tank, etc.</u>			
93	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
94	110mm Pipes laid in and including trenches not exceeding 1m deep	m	90
<u>Extra over uPVC pipes for fittings</u>			
95	110mm Bend	No	11
96	110mm Junction	No	11
<u>uPVC gulleys</u>			
97	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	3
<u>WASTE UNIONS ETC</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>"Cobra Watertech"</u>			
98	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	5
<u>TRAPS ETC</u>			
<u>"Cobra Watertech"</u>			
99	Cobra Ref. 365/40" CP bottle trap	No	3
<u>Marley</u>			
100	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
<u>TAPS, VALVES, ETC</u>			
101	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	3
102	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>			
<u>uPVC pipes</u>			
103	50mm Pipes	m	65
<u>Extra over uPVC pipes for fittings</u>			
104	50mm Bend	No	12
105	50mm Access bend	No	12
106	50mm Junction	No	12
<u>WATER SUPPLIES</u>			
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Class 0 copper pipes</u>			
107	15mm Pipes	m	55
108	22mm Pipes	m	95
<u>Extra over class 0 copper pipes for capillary fittings</u>			
109	15mm Fittings	No	60
110	22mm Pipes	No	30
<u>SUNDRIES</u>			
111	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	5
112	Ditto, but in hard rock	m3	1
113	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
114	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	1
<u>TESTING</u>			
115	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	
Carried Forward			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward

R

SECTION NO.5

BILL NO. 13

PAINTWORK

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

PAINTWORK ETC TO NEW WORK

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

117

On fascias and barge boards

m2

15

Carried Forward

R

MD4 - Waterborne

R MAHANGE & ASSOCIATES

Brought Forward			R
<u>ON METAL</u>			
<u>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</u>			
118	On door frames	m2	10
<u>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</u>			
119	On windows with burglar bars	m2	5
<u>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</u>			
120	On gates (Measured over the full flat area of both sides)	m2	10
<u>ON WOOD</u>			
<u>Under coat and minimum 2 coats gloss enamel, colour TBC</u>			
121	On doors (External)	m2	10
122	On doors (Internal)	m2	15
Carried to Summary			R
MD4 - Waterborne			
R MAHANGE & ASSOCIATESS			

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.6</u></p>			
<p><u>BILL NO. 1</u></p>			
<p><u>EARTHWORKS (PROVISIONAL)</u></p>			
<p><u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Carting away of excavated material</u></p>			
<p><u>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</u></p>			
<p><u>Filling</u></p>			
<p>Carried Forward</p>			
<p>F8 - Waterborne</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

Brought Forward		R
<p><u>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</u></p>		
<p><u>Soil poisoning</u></p>		
<p><u>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</u></p>		
<p><u>SITE CLEARANCE ETC</u></p>		
<p><u>Site clearance</u></p>		
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2 75
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2 75
<p><u>EXCAVATION, FILLING, ETC</u></p>		
<p><u>Excavation in earth not exceeding 2m deep</u></p>		
3	Trenches	m3 17
4	Thickening under aprons	m3 4
<p><u>Extra over trench and hole excavations in earth for excavation in</u></p>		
5	Soft rock	m3 4
6	Hard rock	m3 2
Carried Forward		R
F8 - Waterborne		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
<u>Extra over all excavations for carting away</u>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	34
<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	46
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving, etc	m3	6
11	Backfilling to trenches, holes, etc	m3	8
<u>Compaction of surfaces</u>			
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	68
<u>Under floors, steps, paving, etc.</u>			
<u>Prescribed density tests on filling</u>			
13	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
<u>Weedkiller mixed in accordance to supplier's specifications</u>			
14	To bottoms and sides of trenches, etc.	m2	69
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>UNREINFORCED CONCRETE, ETC.</u>			
<u>15MPa/19mm concrete</u>			
18	Surface blinding under footings and bases	m3	1
<u>25MPa/19mm concrete</u>			
19	Strip footings	m3	5
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm concrete</u>			
20	Surface beds and apron	m3	7
21	Extra over for thickening in pits or apron for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	32
<u>TEST CUBES</u>			
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	2.0
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>			
23	Surface beds, slabs, etc	m2	68
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>			
<u>Smooth formwork to sides</u>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	34
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Mild steel reinforcement to structural concrete work</u>			
25	8mm Diameter bars	t	0.36
26	10mm Diameter bars	t	0.36
<u>Fabric Reinforcement</u>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	35
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
<u>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</u>			
<u>Face bricks</u>			
<u>Bricks shall be ordered timeously to obtain uniformity in size and colour</u>			
<u>Pointing</u>			
<u>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</u>			
<u>FOUNDATIONS (PROVISIONAL)</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
28	One brick walls	m2	19
29	Half brick walls	m2	
<u>FACE BRICKWORK</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
30	Extra over brickwork for face brickwork	m2	5
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
31	Half brick walls in beamfilling .	m2	8
32	Half brickwall in superstructure	m2	42
33	One brick walls	m2	83
<u>FACE BRICKWORK</u>			
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
34	Extra over brickwork for face brickwork	m2	91
<u>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</u>			
35	Extra over brickwork for brick-on-edge header course lintel	m	9
36	110mm Wide sill set level and slightly projecting	m	10
37	220mm Wide sill set sloping and slightly protecting outside	m	9
38	Fair cutting fitting around pipe not exceeding 100mm	No	5
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	9
<u>BRICKWORK SUNDRIES</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Brickwork reinforcement</u>			
40	75mm Wide reinforcement built in horizontally	m	165
41	150mm Wide reinforcement built in horizontally	m	402
<u>Galvanised wire ties etc</u>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	24
<u>Turning pieces to lintels etc.</u>			
43	115mm Wide turning pieces	m	10
44	230mm Wide turning pieces	m	4
<u>Prestressed fabricated lintels</u>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10
<u>Air bricks etc.</u>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	115
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
47	In walls	m2	10
<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
48	Under surface beds	m2	68
<u>FLOOR AND WALL SEALERS</u>			
<u>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</u>			
49	Around steel windows and door frames	m	89
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
50	Roof covering with pitch not exceeding 25 degrees	m2	51
<u>ROOF AND WALL INSULATION</u>			
51	12" Thermal resistance insulation laid on purlins	m2	51
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>ROOFS, ETC.</u>			
<u>Sawn softwood grade 6</u>			
52	76 x 38mm Wall plates	m	22
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	68
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	
<u>Sundries</u>			
56	Two coats creosote on sawn timbers	m2	38
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	72
58	Hurricane clips	No	72
<u>EAVES, VERGES, ETC</u>			
<u>Pressed fibre-cement:</u>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	32
<u>DOORS, ETC</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

		Brought Forward		R
				R
		<u>Wrought meranti doors hung to steel frames</u>		
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3	
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	8	
		Carried Forward		R
F8 - Waterborne				
R MAHANGE & ASSOCIATESS				

		Brought Forward		R
<u>SECTION NO.6</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>				
<u>HINGES, BOLTS, ETC</u>				
<u>100mm Chrome plated "D" type handle 3 by solid brace hinges</u>				
<u>CATCHES,CABIN HOOKS, ETC</u>				
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3	
<u>LOCKS</u>				
<u>Approved</u>				
63	Three lever mortice lock set	No	3	
64	Indicator lock set	No	8	
65	Security double throw dead lock (no latch)	No	3	
<u>HANDLES, ETC.</u>				
<u>Aluminium Pull Handle</u>				
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	No		
<u>SUNDRIES</u>				
		Carried Forward		R
F8 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
<u>ASSA ABLOY</u>			
67	38mm Diameter rubber door stop plugged	No	3
<u>Vaal Paragon</u>			
68	32mm Type 9 back grab rail 800mm long plugged	No	1
69	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Dorma:</u>			
70	DSS-130 Engraved "Male" information sign, plugged	No	
71	DSS-131 Engraved "Female" information sign, plugged	No	3
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>Sundries</u>			
<u>Kimberley-Clark or Similar</u>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	9
<u>stainless Steel</u>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	2
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward		R
<u>SECTION NO.6</u>		
<u>BILL NO. 8</u>		
<u>METALWORK</u>		
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>		
<u>WELDED SCREENS, GATES, ETC</u>		
<u>Gates to external doors</u>		
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No 3
<u>PRESSED STEEL DOOR FRAMES</u>		
<u>1,2mm Double rebated frames suitable for half brick walls</u>		
78	Frame for door size 813 x 2032mm high	No 8
<u>1,2mm Double rebated frames suitable for one brick walls</u>		
79	Frame for door size 813 x 2032mm high	No 3
<u>STEEL WINDOWS, DOORS, ETC</u>		
<u>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>		
80	Window type NE1, size 533 x 654mm high	No 9
81	Window type NE7, size 1022 x 654mm high	No 4
<u>Sundries</u>		
Carried Forward		R
F8 - Waterborne		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
<u>SECTION NO.6</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
<u>RAINWATER DISPOSAL</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>Aluminium Zinc Seamless Gutters</u>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	12
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	6
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<u>SANITARY FITTINGS</u>			
<u>"Vaal" or similar and approved</u>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	5
91	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	8
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
92	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
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
<u>PRECAST CONCRETE WASH HAND TROUGH</u>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<u>Rainwater tank, etc.</u>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	90
<u>Extra over uPVC pipes for fittings</u>			
97	110mm Bend	No	11
98	110mm Junction	No	11
<u>uPVC gulleys</u>			
99	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	3
<u>WASTE UNIONS ETC</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>"Cobra Watertech"</u>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	8
<u>TRAPS ETC</u>			
<u>"Cobra Watertech"</u>			
101	Cobra Ref. 365/40" CP bottle trap	No	8
<u>Marley</u>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	8
<u>TAPS, VALVES, ETC</u>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	8
104	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	8
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
105	50mm Pipes	m	66
<u>Extra over uPVC pipes for fittings</u>			
106	50mm Bend	No	12
107	50mm Access bend	No	12
108	50mm Junction	No	12
<u>WATER SUPPLIES</u>			
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Class 0 copper pipes</u>			
109	15mm Pipes	m	54
110	22mm Pipes	m	90
<u>Extra over class 0 copper pipes for capillary fittings</u>			
111	15mm Fittings	No	60
112	22mm Pipes	No	30
<u>SUNDRIES</u>			
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	
114	Ditto, but in hard rock	m3	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	
<u>TESTING</u>			
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	
Carried Forward			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

	Brought Forward			R
	<u>SECTION NO.6</u>			
	<u>BILL NO. 13</u>			
	<u>PAINTWORK</u>			
	<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	<u>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</u>			
	<u>Previously painted metal surfaces</u>			
	<u>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</u>			
	<u>Previously painted wood surfaces</u>			
	<u>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</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
119	On fascias and barge boards	m2	15	
	Carried Forward			R
	F8 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>ON METAL</u>			
<u>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</u>			
120	On door frames	m2	15
<u>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</u>			
121	On windows with burglar bars	m2	6
<u>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</u>			
122	On gates (Measured over the full flat area of both sides)	m2	12
<u>ON WOOD</u>			
<u>Under coat and minimum 2 coats gloss enamel, colour TBC</u>			
123	On doors (External)	m2	11
124	On doors (Internal)	m2	27
Carried to Summary			R
F8 - Waterborne			
R MAHANGE & ASSOCIATESS			

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.7</u></p>			
<p><u>BILL NO. 1</u></p>			
<p><u>EARTHWORKS (PROVISIONAL)</u></p>			
<p><u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Nature of ground</u></p>			
<p><u>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</u></p>			
<p><u>Carting away of excavated material</u></p>			
<p><u>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</u></p>			
<p><u>Filling</u></p>			
<p>Carried Forward</p>			
<p>Gr R10 - Waterborne</p>			
<p>R MAHANGE & ASSOCIATESS</p>			
		R	

Brought Forward			R
<p><u>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</u></p>			
<p><u>Soil poisoning</u></p>			
<p><u>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</u></p>			
<p><u>SITE CLEARANCE ETC</u></p>			
<p><u>Site clearance</u></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	100
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	100
<p><u>EXCAVATION, FILLING, ETC</u></p>			
<p><u>Excavation in earth not exceeding 2m deep</u></p>			
3	Trenches	m3	25
4	Thickening under aprons	m3	5
<p><u>Extra over trench and hole excavations in earth for excavation in</u></p>			
5	Soft rock	m3	5
6	Hard rock	m3	3
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Extra over all excavations for carting away</u>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	50
<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	65
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving, etc	m3	10
11	Backfilling to trenches, holes, etc	m3	15
<u>Compaction of surfaces</u>			
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	90
<u>Under floors, steps, paving, etc.</u>			
<u>Prescribed density tests on filling</u>			
13	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
<u>Weedkiller mixed in accordance to supplier's specifications</u>			
14	To bottoms and sides of trenches, etc.	m2	95
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	90
	<u>Soil insecticide</u>		
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	90
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>UNREINFORCED CONCRETE, ETC.</u>			
<u>15MPa/19mm concrete</u>			
18	Surface blinding under footings and bases	m3	3
<u>25MPa/19mm concrete</u>			
19	Strip footings	m3	10
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm concrete</u>			
20	Surface beds and apron	m3	10
21	Extra over for thickening in pits or apron for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	45
<u>TEST CUBES</u>			
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	2.0
<u>CONCRETE SUNDRIES</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>			
23	Surface beds, slabs, etc	m2	90
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>			
<u>Smooth formwork to sides</u>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	45
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Mild steel reinforcement to structural concrete work</u>			
25	8mm Diameter bars	t	1.00
26	10mm Diameter bars	t	1.00
<u>Fabric Reinforcement</u>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	55
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATES			

Brought Forward				R
<u>SECTION NO.7</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>BRICKWORK</u>				
<u>Sizes in descriptions</u>				
<u>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</u>				
<u>Face bricks</u>				
<u>Bricks shall be ordered timeously to obtain uniformity in size and colour</u>				
<u>Pointing</u>				
<u>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</u>				
<u>FOUNDATIONS (PROVISIONAL)</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
28	One brick walls	m2	25	
<u>FACE BRICKWORK</u>				
Carried Forward				R
Gr R10 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
29	Extra over brickwork for face brickwork	m2	10
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
30	Half brick walls in beamfilling .	m2	10
31	Half brickwall in superstructure	m2	55
32	One brick walls	m2	115
<u>FACE BRICKWORK</u>			
<u>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</u>			
33	Extra over brickwork for face brickwork	m2	110
<u>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</u>			
34	Extra over brickwork for brick-on-edge header course lintel	m	15
35	110mm Wide sill set level and slightly projecting	m	10
36	220mm Wide sill set sloping and slightly protecting outside	m	15
37	Fair cutting fitting around pipe not exceeding 100mm	No	10
38	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10
<u>BRICKWORK SUNDRIES</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Brickwork reinforcement</u>			
39	75mm Wide reinforcement built in horizontally	m	220
40	150mm Wide reinforcement built in horizontally	m	555
<u>Galvanised wire ties etc</u>			
41	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	34
<u>Turning pieces to lintels etc.</u>			
42	115mm Wide turning pieces	m	10
43	230mm Wide turning pieces	m	5
<u>Prestressed fabricated lintels</u>			
44	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10
<u>Air bricks etc.</u>			
45	230 x 152mm terra-cotta vermin proofed louvered air brick	No	144
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
46	In walls	m2	15
<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
47	Under surface beds	m2	90
<u>FLOOR AND WALL SEALERS</u>			
<u>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</u>			
48	Around steel windows and door frames	m	120
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
49	Roof covering with pitch not exceeding 25 degrees	m2	70
<u>ROOF AND WALL INSULATION</u>			
50	12" Thermal resistance sisalation laid on purlins	m2	70
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>ROOFS, ETC.</u>			
<u>Sawn softwood grade 6</u>			
51	76 x 38mm Wall plates	m	30
52	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	85
53	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	90
<u>Sundries</u>			
54	Two coats creosote on sawn timbers	m2	55
55	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	108
56	Hurricane clips	No	108
<u>EAVES, VERGES, ETC</u>			
<u>Pressed fibre-cement:</u>			
57	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	40
<u>DOORS, ETC</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
58	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	4
59	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	10
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

		Brought Forward		R
<u>SECTION NO.7</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>				
<u>HINGES, BOLTS, ETC</u>				
<u>100mm Chrome plated "D" type handle 3 by solid brace hinges</u>				
<u>CATCHES,CABIN HOOKS, ETC</u>				
60	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
<u>LOCKS</u>				
<u>Approved</u>				
61	Three lever mortice lock set	No	4	
62	Indicator lock set	No	10	
63	Security double throw dead lock (no latch)	No	4	
<u>HANDLES, ETC.</u>				
<u>Aluminium Pull Handle</u>				
64	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	No	14	
<u>SUNDRIES</u>				
		Carried Forward		R
Gr R10 - Waterborne				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
<u>ASSA ABLOY</u>			
65	38mm Diameter rubber door stop plugged	No	4
<u>Vaal Paragon</u>			
66	32mm Type 9 back grab rail 800mm long plugged	No	1
67	32mm Type 8 side grab rail 900mm girth plugged	No	1
<u>LETTERS, NAMEPLATES, ETC</u>			
<u>Dorma:</u>			
68	DSS-130 Engraved "Male" information sign, plugged	No	2
69	DSS-131 Engraved "Female" information sign, plugged	No	1
70	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<u>BATHROOM FITTINGS</u>			
<u>Sundries</u>			
<u>Kimberley-Clark or Similar</u>			
71	SQ2 code 405607B white none lockable toilet roll holder	No	11
<u>stainless Steel</u>			
72	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
73	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	5
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Gates to external doors</u>			
74	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	4
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
75	Frame for door size 813 x 2032mm high	No	10
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
76	Frame for door size 813 x 2032mm high	No	4
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</u>			
77	Window type NE1, size 533 x 654mm high	No	13
78	Window type NE7, size 1022 x 654mm high	No	5
<u>Sundries</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>GRANOLITHIC</u>			
<u>Untinted granolithic on concrete</u>			
80	20mm Thick on floors	m2	50
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
81	On internal plastered walls	m2	225
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.7</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
<u>RAINWATER DISPOSAL</u>			
<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
<u>Aluminium Zinc Seamless Gutters</u>			
82	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	15
83	Extra over eaves gutter for stopped end	No	2
84	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
85	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
86	Ditto .for shoe	No	2
<u>SANITARY FITTINGS</u>			
<u>"Vaal" or similar and approved</u>			
87	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	7
88	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	10
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
89	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
90	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	4
<u>PRECAST CONCRETE WASH HAND TROUGH</u>			
91	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	
<u>Rainwater tank, etc.</u>			
92	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
93	110mm Pipes laid in and including trenches not exceeding 1m deep	m	120
<u>Extra over uPVC pipes for fittings</u>			
94	110mm Bend	No	11
95	110mm Junction	No	11
<u>uPVC gulleys</u>			
96	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	4
<u>WASTE UNIONS ETC</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>"Cobra Watertech"</u>			
97	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
<u>TRAPS ETC</u>			
<u>"Cobra Watertech"</u>			
98	Cobra Ref. 365/40" CP bottle trap	No	7
<u>Marley</u>			
99	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	7
<u>TAPS, VALVES, ETC</u>			
100	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	7
101	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	7
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
102	50mm Pipes	m	65
<u>Extra over uPVC pipes for fittings</u>			
103	50mm Bend	No	12
104	50mm Access bend	No	12
105	50mm Junction	No	12
<u>WATER SUPPLIES</u>			
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Class 0 copper pipes</u>			
106	15mm Pipes	m	55
107	22mm Pipes	m	90
<u>Extra over class 0 copper pipes for capillary fittings</u>			
108	15mm Fittings	No	60
109	22mm Pipes	No	30
110	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	
Carried Forward			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

	Brought Forward			R
	<u>SECTION NO.7</u>			
	<u>BILL NO. 13</u>			
	<u>PAINTWORK</u>			
	<u>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	<u>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</u>			
	<u>Previously painted metal surfaces</u>			
	<u>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</u>			
	<u>Previously painted wood surfaces</u>			
	<u>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</u>			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
112	On fascias and barge boards	m2	20	
	Carried Forward			R
	Gr R10 - Waterborne			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>ON METAL</u>			
<u>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</u>			
113	On door frames	m2	20
<u>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</u>			
114	On windows with burglar bars	m2	10
<u>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</u>			
115	On gates (Measured over the full flat area of both sides)	m2	15
<u>ON WOOD</u>			
<u>Under coat and minimum 2 coats gloss enamel, colour TBC</u>			
116	On doors (External)	m2	15
117	On doors (Internal)	m2	35
Carried to Summary			R
Gr R10 - Waterborne			
R MAHANGE & ASSOCIATESS			

Item No		Quantity	Rate	Amount
	<u>EXTERNAL WORKS</u>			
	<u>SECTION NO.8</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	30	
2	50mm Pipes laid in and including trenches not exceeding 1m deep	m	175	
	<u>Extra over Class 10 HDPE type IV pipes for fittings</u>			
3	40mm Fittings	No	20	
4	40mm Reducer	No	6	
5	40mm Bend	No	12	
6	50mm Reducer	No	6	
7	50mm Bend	No	12	
8	50mm Threaded adaptor	No	5	
	<u>Galvanised medium steel pipes with screwed and socketed joints</u>			
9	50mm Pipes	m	25	
	<u>Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings</u>			
10	50mm Fittings	No	4	
11	50mm Bush	No	4	
12	50mm Elbow	No	4	
	Carried Forward			R
	External works			
	R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.8</u>			
<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	10
<u>Extra over trench and hole excavations in earth for excavation in</u>			
17	Soft rock	m3	5
18	Hard rock	m3	5
<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	5
<u>Risk of collapse of excavations</u>			
20	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	15
<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	2
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
	<u>Soil insecticide</u>		
23	To bottoms and sides of trenches, etc.	m2	25
	<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	25
	<u>15Mpa/19mm Concrete</u>		
25	Blinding	m3	1
	<u>25Mpa/19mm Concrete</u>		
26	Bases	m3	5
27	Platform surface beds cast in panels	m3	5
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
28	Platform surface beds	m2	25
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
29	On top of bases	m2	5
	<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	
31	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	3
	<u>Galvanized medium normalized mild steel piping</u>		
32	25mm Pipes	m	60
	Carried Forward		R
	External works		
	R MAHANGE & ASSOCIATESS		

Brought Forward				R
33	50mm Pipes	m	105	
<u>Extra over galvanised mild steel water supply pipes for fittings:</u>				
34	25mm Fittings.	No	10	
35	50mm Elbows.	No	10	
36	50mm Union.	No	10	
37	50mm Reducing bush.	No	4	
<u>"Cobra Watertech" or other equal approved</u>				
38	15mm "Cobra Ref. 108LK" brass hose biptap.	No	4	
39	50mm Fullway gate valve	No	4	
<u>The following in structural steel tank stands</u>				
<u>Welded steel columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u>				
40	80 x 80mm x 6mm angle columns	t	0.20	
<u>Steel members and girth, bolted to steel</u>				
41	30 x 30mm x 6mm Flat-bar	t	0.20	
42	40 x 40mm x 5mm angle	t	0.20	
43	125 x 75mm x 8mm unequal angle	t	0.20	
44	125 x 50mm x 20 x 2mm Lipped channel	t	0.20	
<u>BOLTS, FASTENERS, ETC. (LI)</u>				
45	High tensile bolts	t	0.05	
Carried Forward				R
External works				
R MAHANGE & ASSOCIATESS				

Brought Forward			R
46	12mm Diameter L-shaped threaded anchor bolt 350mm girth embedded in top of concrete	No	16
	<u>ON METAL</u>		
	<u>Undercoat and minimum 2 coat gloss enamel</u>		
47	Paint to structural steel	m	125
	<u>TESTING</u>		
	<u>Testing of water tanks</u>		
48	Testing for tank	Item	
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward		R
<u>SECTION NO.8</u>		
<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 40
<u>EXCAVATION, FILLING, ETC.</u>		
<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>		
51	Holes	m3 90
<u>Extra over all excavations for carting away</u>		
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
Carried Forward		R
External works		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
	<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
	<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
	<u>Keeping excavations free of water</u>		
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	1
<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	0.1
<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
Carried Forward			R
	External works		
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>Smooth formwork to form</u>			
62	Opening not exceeding 1m girth through 170mm slab	No	2
<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	20
<u>REINFORCEMENT</u>			
<u>Fabric reinforcement</u>			
64	Type 888 fabric reinforcement in concrete surface beds, slabs, etc	m2	45
<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	230
<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	15
<u>BRICKWORK SUNDRIES</u>			
68	Leave of form 450 x 150mm high opening through a one brick wall	No	2
69	Leave or form opening through one brickwall for pipe 110mm dia	No	3
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>PLASTERING</u>			
<u>Watertight cement plaster on brickwork</u>			
70	On walls	m2	60
<u>Screed</u>			
71	On floors	m2	20
<u>Two coats approved epoxy coats</u>			
72	On walls and floors	m2	80
<u>PLUMBING AND DRAINAGE</u>			
<u>uPVC pipes</u>			
73	110mm Pipes	m	45
<u>Extra over uPVC pipes for fittings</u>			
74	110mm Tee	No	2
<u>Cover, etc</u>			
75	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	4
76	Lifting key for manhole cover	No	1
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.8</u>			
<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
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u>		
84	On top of french drain as soil cover	m3	5
	<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
	<u>200 - 300mm Diameter clean washed stone filling or similar approved by engineer</u>		
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 Forward		
	External works		
	R MAHANGE & ASSOCIATESS		
			R

		Brought Forward		R
		<u>Extra over uPVC pipes for fittings</u>		
92	110mm End cap	No	4	
93	110mm Bend	No	2	
		Carried Forward		
External works				R
R MAHANGE & ASSOCIATESS				

Brought Forward			R
<u>SECTION NO.8</u>			
<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
<u>Extra over trench and hole excavations in earth for excavation in</u>			
96	Soft rock	m3	5
97	Hard rock	m3	2
<u>Extra over all excavations for carting away</u>			
98	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10
<u>Risk of collapse of excavations</u>			
99	Sides of trench and hole excavations not exceeding 1,5m deep	m2	25
<u>Keeping excavations free of water</u>			
100	Keeping excavations free of all water other than subterranean water		Item
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

Brought Forward			R
<u>SECTION NO.8</u>			
<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	30
<u>REINFORCEMENT</u>			
<u>Fabric reinforcement</u>			
106	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	30
<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	20
Carried Forward			R
External works			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
109	150mm Wide reinforcement built in horizontally	m	50
<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	25
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R3 500,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
111	Coping on top of one brick wall	m	50
<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	30
<u>WATER SUPPLIES</u>			
<u>"Jojo" approved SANS PVC water tanks</u>			
113	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	2
<u>Galvanized medium normalized mild steel piping</u>			
114	25mm Pipes	m	10
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

			Brought Forward		R
			<u>Extra over galvanised mild steel water supply pipes for fittings:</u>		
115	25mm Fittings.	No	10		
116	15mm "Cobra Ref. 108LK" brass hose biptap	No	5		
			Carried Forward		R
External works					
R MAHANGE & ASSOCIATESS					

Brought Forward		R
<u>SECTION NO.8</u>		
<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 410
118	Stripping average 100mm thick layer of top soil and stockpiling on site	m2 410
<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 150
<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 150
<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 150
Carried Forward		R
External works		
R MAHANGE & ASSOCIATES		

Brought Forward			R
<u>Compaction of surfaces</u>			
122	Compaction of ground surface under floors etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	410
<u>Soil poisoning</u>			
123	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasiem 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	410
<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	410
125	Fig. 10 kerbs to sides of paving	m	615
126	15Mpa/19mm unreinforced concrete in haunching	m3	1
Carried Forward			R
External works			
R MAHANGE & ASSOCIATES			

Brought Forward		R
<u>SECTION NO.8</u>		
<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 250
128	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, paving, etc.	m3 35
129	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3 35
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 15
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 250
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 250
Carried Forward		R
External works		
R MAHANGE & ASSOCIATESS		

Brought Forward			R
<u>Reinforced Concrete</u>			
134	25Mpa/19mm Mass concrete in V-shaped channel 2000mm wide x 75mm thick with rounded salient edges and finished on exposed surfaces with 2:1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2,0m long with 12mm bitumen impregnated soft board movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork	m	230
135	Extra for fair open end	No	25
136	Extra for fair stopped end	No	25
137	Extra for angle intersection	No	30
Carried Forward			R
External works			
R MAHANGE & ASSOCIATESS			

	Brought Forward			R
	<u>SECTION NO.8</u>			
	<u>FENCING AROUND TANK STANDS</u>			
	<u>FENCING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>For preambles see "Specifications of materials and methods to be used - PW 371"</u>			
	<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 placed 300mm from the top of the paling and 300mm from the bottom paling (350mm from ground level). These are to be welded flush 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	1 040	
	Carried Forward			R
	External works			
	R MAHANGE & ASSOCIATES			

	Brought Forward			
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	345	R
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 Summary			R
	External works			
	R MAHANGE & ASSOCIATESS			

Item No		Quantity	Rate	Amount
	<u>PROVISIONAL SUMS</u>			
1	Electrical works	Item		
2	Add profit and attendance	%		
3	Borehole refurbishment	Item		
4	Add profit and attendance	%		
5	Refurbishment of existing ablutions	Item		
6	Add profit and attendance	%		
	Carried to Summary			
	Provisional Sums			R
	R MAHANGE & ASSOCIATESS			

Bill No	<u>FINAL SUMMARY</u>	Page No	Amount
1	P's and G's	30	
2	Alterations	33	
3	SD12 - Waterborne	58	
4	F10 - Waterborne	83	
5	MD4 - Waterborne	108	
6	F8 - Waterborne	133	
7	Gr R10 - Waterborne	158	
8	External works	182	
9	Provisional Sums	183	
	Sub Total		R
	Contingency sum (@10%)		R
	Sub Total		R
	VAT (@15%)		R
	Carried to Form of Tender		R
	R MAHANGE & ASSOCIATESS		