

Item No	Quantity	Rate	Amount
<u>SECTION NO. 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
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			
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			
Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof			
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			
Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"			
Carried Forward			R
P's and G's			
R MAHANGE & ASSOCIATES			

	Brought Forward		R
	<p>Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence</p> <p><u>PREAMBLES FOR TRADES</u></p> <p>1 The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p> <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles</p> <p 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>		
	Carried Forward		R
	<p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>		

Brought Forward		R	
F:..... V:..... T:.....	Item		
<u>Objective and Preparation (A2 to A14)</u>			
Offer acceptance and performance (clause 2)			
F:..... V:..... T:.....	Item		
Documents (clause 3)			
F:..... V:..... T:.....	Item		
Design responsibility (clause 4)			
F:..... V:..... T:.....	Item		
Employer's agents (clause 5)			
F:..... V:..... T:.....	Item		
The principal agent shall:			
- monitor and control progress and scheduling			
- monitor all contract conditions, and			
- coordinate the efforts of the employer's agents, the contractor and subcontractors			
<p>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</p>			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Brought Forward		R	
<p>The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process</p>			
<p>Site representative (clause 6)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Compliance with regulations (clause 7)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Works risk (clause 8)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Indemnities (clause 9)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Works insurances (clause 10)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Liability insurances (clause 11)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Effecting insurance (clause 12)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>NO CLAUSE (Clause 13)</p>			
<p>Security (clause 14)</p>			
Carried Forward		R	
<p>P's and G's</p>			
<p>R MAHANGE & ASSOCIATES</p>			

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 & ASSOCIATES			

Brought Forward		R	
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 & ASSOCIATES			

Brought Forward		R	
<p>The removal and replacement of materials and/or workmanship that do not conform to specification or drawings shall not constitute grounds for an extension of the construction period nor for an adjustment to the contract sum (clause 29.3)</p>			
<p>Penalty for non-completion (clause 30)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<u>Payment (A31 - A35)</u>			
<p>Interim payment to the contractor (clause 31)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Adjustment to the contract value (clause 32)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Where prices are submitted by the contractor or nominated/selected subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing</p>			
<p>Recovery of expense and loss (clause 33)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Final account and final payment (clause 34)</p>			
<p>F:..... V:..... T:.....</p>	Item		
Carried Forward		R	
<p>P's and G's</p>			
R MAHANGE & ASSOCIATES			

Brought Forward		R	
<p>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</p>			
<p>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</p>			
<p>Payment to other parties (clause 35)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p><u>Cancellation (A36-A39)</u></p>			
<p>Cancellation by employer - contractor's default (clause 36)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Cancellation by employer - loss and damage (clause 37)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Cancellation by contractor - employer's default (clause 38)</p>			
<p>F:..... V:..... T:.....</p>	Item		
<p>Cancellation - cessation of the works (clause 39)</p>			
<p>F:..... V:..... T:.....</p>	Item		
Carried Forward		R	
<p>P's and G's</p>			
<p>R MAHANGE & ASSOCIATES</p>			

Brought Forward		R	
<u>Dispute (A40)</u>			
Dispute Settlement (clause 40)			
F:..... V:..... T:.....	Item		
<u>Substitute Provisions (A41)</u>			
State clauses (Clause 41)			
F:..... V:..... T:.....	Item		
Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
<u>THE SCHEDULE</u>			
Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
Pre-tender information (clause 42)			
F:..... V:..... T:.....	Item		
<u>42.1 CONTRACTING AND OTHER PARTIES</u>			
42.1.1 Employer: THE MVULA TRUST			
42.1.2 Principal Agent: R Mahange and Associates			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

<p style="text-align: right;">Brought Forward</p> <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>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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

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

Brought Forward		R	
F:..... V:..... T:.....	Item		
Interests of agents (B2.4)			
F:..... V:..... T:.....	Item		
Priced documents (B2.5)			
F:..... V:..... T:.....	Item		
Tender submission (B2.6)			
F:..... V:..... T:.....	Item		
Defined works area (B3.1)			
F:..... V:..... T:.....	Item		
<u>The site (B3)</u>			
Geotechnical investigation (B3.2)			
F:..... V:..... T:.....	Item		
Inspection of the site (B3.3)			
F:..... V:..... T:.....	Item		
Existing premises occupied (B3.4)			
F:..... V:..... T:.....	Item		
Specific requirements:			
The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.			
Previous work - dimensional accuracy (B3.5)			
F:..... V:..... T:.....	Item		
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Brought Forward		R	
Previous work - defects (B3.6)			
F:..... V:..... T:.....	Item		
Services - known (B3.7)			
F:..... V:..... T:.....	Item		
Services - unknown (B3.8)			
F:..... V:..... T:.....	Item		
Protection of trees etc. (B3.9)			
F:..... V:..... T:.....	Item		
Articles of value (B3.10)			
F:..... V:..... T:.....	Item		
Inspection of adjoining properties etc. (B3.11)			
F:..... V:..... T:.....	Item		
<u>Management of contract (B4)</u>			
Management of the works (B4.1)			
F:..... V:..... T:.....	Item		
Programme for the works (B4.2)			
F:..... V:..... T:.....	Item		
Progress meetings (B4.3)			
F:..... V:..... T:.....	Item		
Technical meetings (B4.4)			
F:..... V:..... T:.....	Item		
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

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 & ASSOCIATES			

Brought Forward		R	
F:..... V:..... T:.....	Item		
Subcontractors' notice board (B6.6)			
F:..... V:..... T:.....	Item		
<u>Temporary services (B7)</u>			
Location (B7.1)			
F:..... V:..... T:.....	Item		
Water (B7.2)			
Option [A] shall apply			
F:..... V:..... T:.....	Item		
Electricity (B7.3)			
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 & ASSOCIATES			

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 & ASSOCIATES			

Brought Forward		R	
Protection/isolation of existing/sectionally occupied works (B11.2)			
F:..... V:..... T:.....	Item		
Security of the Works (B11.3)			
F:..... V:..... T:.....	Item		
Notice before covering work (B11.4)			
F:..... V:..... T:.....	Item		
Disturbance (B11.5)			
F:..... V:..... T:.....	Item		
Environmental Disturbance (B11.6)			
F:..... V:..... T:.....	Item		
Works cleaning and clearing (B11.7)			
F:..... V:..... T:.....	Item		
Vermin (B11.8)			
F:..... V:..... T:.....	Item		
Overhand work (B11.9)			
F:..... V:..... T:.....	Item		
Instruction manuals and guarantees (B11.10)			
F:..... V:..... T:.....	Item		
As built information (B11.11)			
F:..... V:..... T:.....	Item		
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

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			

<p style="text-align: right;">Brought Forward</p> <p>12.1.11 Inspection of adjoining properties (B3.11)</p> <p>12.1.12 Enclosure of the works (B6.2)</p> <p>12.1.13 Offices (B6.4.3)</p> <p>Specific requirements:</p> <p>The contractor shall provide, maintain and remove, on completion of the works, an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, 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.</p> <p>12.1.14 Main notice board (B6.5)</p> <p style="text-align: right;">YES</p> <p>12.1.15 Subcontractors notice board (B6.6) A notice board is required</p> <p style="text-align: right;">Yes</p> <p>12.1.16 Water (B7.2) Alternative Selected: A</p> <p>12.1.17 Electricity (B7.3) Alternative selected: A</p> <p>12.1.18 Telecommunications (B7.4)</p> <p>12.1.19 Ablution facilities (B7.5) Alternative selected: A</p> <p>12.1.20 Protection of existing/sectionally occupied works (B11.2)</p> <p>12.1.21 Special attendance (B9.2)</p> <p>Subcontractor (1) details: N/A</p> <p>12.1.22 Protection of the works (B11.1)</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>		R	

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			
Site instructions			
Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor			
F:..... V:..... T:.....	Item		
Black economic empowerment and training			
F:..... V:..... T:.....	Item		
Proprietary branded products			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Brought Forward		R	
F:..... V:..... T:.....	Item		
Testing of flat roof waterproofing for water tightness			
<p>Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing</p>			
F:..... V:..... T:.....	Item		
<p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative</p>			
Contract instructions			
F:..... V:..... T:.....	Item		
<p>Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor</p>			
Labour record			
F:..... V:..... T:.....	Item		
<p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week</p>			
Plant record			
F:..... V:..... T:.....	Item		
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

<p style="text-align: center;">Brought Forward</p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week</p> <p>Guarantees</p> <p>F:..... V:..... T:.....</p> <p>Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement</p> <p>Overtime</p> <p>F:..... V:..... T:.....</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>Co-operation of contractor for cost management</p> <p>F:..... V:..... T:.....</p>		R	
	Item		
	Item		
	Item		
<p style="text-align: center;">Carried Forward</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>		R	

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 & ASSOCIATES</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>			
Occupational Health and Safety Specification			
F:..... V:..... T:.....	Item		
<p>Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines</p>			
Occupational Health and Safety Specification			
F:..... V:..... T:.....	Item		
<p>Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc</p>			
Occupational Health and Safety Specification			
F:..... V:..... T:.....	Item		
<p>Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc.</p>			
Provision of personal protective equipment (PPE)			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

Brought Forward		R	
F:..... V:..... T:.....	Item		
Provision of reflective vests			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of hard hats			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of protective footwear			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of earplugs			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of dust masks			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of gloves			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of high visibility overalls to SARTSM Chapter 13 Level 3			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

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 & ASSOCIATES				

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		
<p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C11.1 to C11.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained.</p>			
Carried Forward		R	
P's and G's			
R MAHANGE & ASSOCIATES			

<p style="text-align: right;">Brought Forward</p> <p>The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p> <p><u>SUMMARY OF CATEGORIES</u></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>P's and G's</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Brought Forward			R
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	86
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	86
EXCAVATION, FILLING, ETC			
Excavation in earth not exceeding 2m deep			
3	Trenches	m3	29
4	Thickening under aprons	m3	3
Extra over trench and hole excavations in earth for excavation in			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

		Brought Forward			R	
		Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	19			
	Risk of collapse of excavations					
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	92			
	Keeping excavations free of water					
9	Keeping excavations free of all water other than subterranean water			Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density					
10	Under floors, steps, paving, etc	m3	11			
11	Backfilling to trenches, holes, etc	m3	16			
	Compaction of surfaces					
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	75			
	Under floors, steps, paving, etc.					
	Prescribed density tests on filling					
13	Modified AASHTO Density	No	5			
	SOIL POISONING					
	Weedkiller mixed in accordance to supplier's specifications					
14	To bottoms and sides of trenches, etc.	m2	120			
		Carried Forward			R	
	F10 WATERBORNE					
	R MAHANGE & ASSOCIATES					

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Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2
25MPa/19mm concrete			
19	Strip footings	m3	7
REINFORCED CONCRETE			
25MPa/19mm concrete			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	37
TEST CUBES			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
CONCRETE SUNDRIES			
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
BRICKWORK			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
Face bricks			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Pointing			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
FOUNDATIONS (PROVISIONAL)			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	25
29	Half brick walls	m2	11
FACE BRICKWORK			
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikrip DPC" embossed damp proof course			
47	In walls	m2	9
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	43
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	99
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
PROFILED METAL SHEETING AND ACCESSORIES			
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
50	Roof covering with pitch not exceeding 25 degrees	m2	51
ROOF AND WALL INSULATION			
51	12" Thermal resistance sisalation laid on purlins	m2	51
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
ROOFS, ETC.			
Sawn softwood grade 6			
52	76 x 38mm Wall plates	m	20
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	77
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	77
Sundries			
56	Two coats creosote on sawn timbers	m2	27
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
EAVES, VERGES, ETC			
Pressed fibre-cement:			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	36
DOORS, ETC			
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2
LOCKS			
Approved			
63	Three lever mortice lock set	No	2
64	Indicator lock set	No	10
65	Security double throw dead lock (no latch)	No	2
HANDLES, ETC.			
Aluminium Pull Handle			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	2.0
SUNDRIES			
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	2	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	1	
69	32mm Type 8 side grab rail 900mm girth plugged	No	1	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No		
71	DSS-131 Engraved "Female" information sign, plugged	No	1	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No		
73	DSS-133 Engraved "Disabled" information sign, plugged	No		
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	12	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2	
Carried Forward				R
F10 WATERBORNE				
R MAHANGE & ASSOCIATES				

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

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Brought Forward			R
<u>SECTION NO. 2</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
85	100 x 100mm standard rainwater gutters fixed with gutter brackets	m	11
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
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	6
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	10
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	
PRECAST CONCRETE WASH HAND TROUGH			
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
Rainwater tank, etc.			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
Extra over uPVC pipes for fittings			
97	110mm Bend	No	12
98	110mm Junction	No	12
uPVC gulleys			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete sorround etc.	No	6
WASTE UNIONS ETC			
Carried Forward			R
F10 WATERBORNE			
R MAHANGE & ASSOCIATES			

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		Brought Forward			R	
		Class 0 copper pipes				
109	15mm Pipes	m	30			
110	22mm Pipes	m	30			
		Extra over class 0 copper pipes for capillary fittings				
111	15mm Fittings	No	24			
112	22mm Pipes	No	24			
		SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	24			
114	Ditto, but in hard rock	m3	5			
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	15			
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	20			
		TESTING				
117	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 & ASSOCIATES					

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		Brought Forward			R
		<u>SECTION NO. 2</u>			
		<u>BILL NO. 12</u>			
		<u>PAINTWORK</u>			
		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			
119	On fascias and barge boards	m2	7		
		Carried Forward			R
	F10 WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	98
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	98
EXCAVATION, FILLING, ETC			
Excavation in earth not exceeding 2m deep			
3	Trenches	m3	36
4	Thickening under aprons	m3	3
Extra over trench and hole excavations in earth for excavation in			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

		Brought Forward			R	
		Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	22			
		Risk of collapse of excavations				
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	108			
		Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water			Item		
		Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
10	Under floors, steps, paving, etc	m3	11			
11	Backfilling to trenches, holes, etc	m3	21			
		Compaction of surfaces				
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	87			
		Under floors, steps, paving, etc.				
		Prescribed density tests on filling				
13	Modified AASHTO Density	No	5			
		SOIL POISONING				
		Weedkiller mixed in accordance to supplier's specifications				
14	To bottoms and sides of trenches, etc.	m2	141			
		Carried Forward			R	
	F12 WATERBORNE					
	R MAHANGE & ASSOCIATES					

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Brought Forward			R
<u>SECTION NO. 3</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2
25MPa/19mm concrete			
19	Strip footings	m3	8
REINFORCED CONCRETE			
25MPa/19mm concrete			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	42
TEST CUBES			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
CONCRETE SUNDRIES			
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 3</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
BRICKWORK			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
Face bricks			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Pointing			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
FOUNDATIONS (PROVISIONAL)			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	28
29	Half brick walls	m2	11
FACE BRICKWORK			
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 3</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	10
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	51
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	110
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R	
<u>SECTION NO. 3</u>				
<u>BILL NO. 5</u>				
<u>ROOF COVERINGS ETC</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
PROFILED METAL SHEETING AND ACCESSORIES				
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
50	Roof covering with pitch not exceeding 25 degrees	m2	61	
ROOF AND WALL INSULATION				
51	12" Thermal resistance sisalation laid on purlins	m2	61	
Carried Forward			R	
F12 WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward				R
<u>SECTION NO. 3</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
ROOFS, ETC.				
Sawn softwood grade 6				
52	76 x 38mm Wall plates	m	25	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	93	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	93	
Sundries				
56	Two coats creosote on sawn timbers	m2	30	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
58	Hurricane clips	No	44	
EAVES, VERGES, ETC				
Pressed fibre-cement:				
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	40	
Carried Forward				R
F12 WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward				R
<u>SECTION NO. 3</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
HINGES, BOLTS, ETC				
100mm Chrome plated "D" type handle 3 by solid brace hinges				
CATCHES,CABIN HOOKS, ETC				
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
LOCKS				
Approved				
63	Three lever mortice lock set	No	2	
64	Indicator lock set	No	12	
65	Security double throw dead lock (no latch)	No	2	
HANDLES, ETC.				
Aluminium Pull Handle				
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	2.0	
SUNDRIES				
Carried Forward				R
F12 WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	2	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	2	
69	32mm Type 8 side grab rail 900mm girth plugged	No	1	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No		
71	DSS-131 Engraved "Female" information sign, plugged	No	1	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No		
73	DSS-133 Engraved "Disabled" information sign, plugged	No		
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	10	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	5	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2	
Carried Forward				R
F12 WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward			R
<u>SECTION NO. 3</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
WELDED SCREENS, GATES, ETC			
Gates to external doors			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
PRESSED STEEL DOOR FRAMES			
1,2mm Double rebated frames suitable for half brick walls			
78	Frame for door size 813 x 2032mm high	No	12
1,2mm Double rebated frames suitable for one brick walls			
79	Frame for door size 813 x 2032mm high	No	2
STEEL WINDOWS, DOORS, ETC			
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
80	Window type NE1, size 533 x 654mm high	No	10
81	Window type NE7, size 1022 x 654mm high	No	5
Sundries			
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 3</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	11
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
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	10
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
PRECAST CONCRETE WASH HAND TROUGH			
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
Rainwater tank, etc.			
93	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
94	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
Extra over uPVC pipes for fittings			
95	110mm Bend	No	12
96	110mm Junction	No	12
uPVC gulleys			
97	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
WASTE UNIONS ETC			
"Cobra Watertech"			
98	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	6
TRAPS ETC			
Carried Forward			R
F12 WATERBORNE			
R MAHANGE & ASSOCIATES			

		Brought Forward		R
	"Cobra Watertech"			
99	Cobra Ref. 365/40" CP bottle trap	No	1	
	Marley			
100	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1	
	TAPS, VALVES, ETC			
101	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	10	
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	2	
	SANITARY PLUMBING			
	uPVC pipes			
103	50mm Pipes	m	50	
	Extra over uPVC pipes for fittings			
104	50mm Bend	No	13	
105	50mm Access bend	No	7	
106	50mm Junction	No	7	
	WATER SUPPLIES			
	Class 0 copper pipes			
107	15mm Pipes	m	50	
108	22mm Pipes	m	50	
	Carried Forward			R
	F12 WATERBORNE			
	R MAHANGE & ASSOCIATES			

		Brought Forward			R
		Extra over class 0 copper pipes for capillary fittings			
109	15mm Fittings	No	28		
110	22mm Pipes	No	28		
		SUNDRIES			
111	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26		
112	Ditto, but in hard rock	m3	6		
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	16		
114	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22		
		TESTING			
115	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item	
		<u>SECTION NO. 3</u>			
		<u>BILL NO. 12</u>			
		<u>GLAZING</u>			
		For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
		GLAZING TO STEEL WITH PUTTY			
		6,38mm Obscure safety glass			
116	Panes not exceeding 0,1 m2	m2	8		
		Carried Forward			R
		F12 WATERBORNE			
		R MAHANGE & ASSOCIATES			

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 3</u></p> <p><u>BILL NO. 13</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>F12 WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>BILL NO. 1</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
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			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R	
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	110	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	110	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	39	
4	Thickening under aprons	m3	3	
Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	5	
6	Hard rock	m3	3	
Carried Forward			R	
S12 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	25		
	Risk of collapse of excavations				
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	123		
	Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
10	Under floors, steps, paving, etc	m3	18		
11	Backfilling to trenches, holes, etc	m3	22		
	Compaction of surfaces				
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	87		
	Under floors, steps, paving, etc.				
	Prescribed density tests on filling				
13	Modified AASHTO Density	No	5		
	SOIL POISONING				
	Weedkiller mixed in accordance to supplier's specifications				
14	To bottoms and sides of trenches, etc.	m2	153		
	Carried Forward			R	
	S12 + D WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2
25MPa/19mm concrete			
19	Strip footings	m3	9
REINFORCED CONCRETE			
25MPa/19mm concrete			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	42
TEST CUBES			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
CONCRETE SUNDRIES			
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
BRICKWORK			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
Face bricks			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Pointing			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
FOUNDATIONS (PROVISIONAL)			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	34
29	Half brick walls	m2	13
FACE BRICKWORK			
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	12
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	49
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	130
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward				R
<u>SECTION NO. 4</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
ROOFS, ETC.				
Sawn softwood grade 6				
52	76 x 38mm Wall plates	m	29	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	107	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	107	
Sundries				
56	Two coats creosote on sawn timbers	m2	33	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
58	Hurricane clips	No	44	
EAVES, VERGES, ETC				
Pressed fibre-cement:				
59	15 x 230mm Nutek Fascias and barge boards including galvanised steel H-profile jointing strips	m	40	
Carried Forward				R
S12 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
LOCKS			
Approved			
63	Three lever mortice lock set	No	3
64	Indicator lock set	No	12
65	Security double throw dead lock (no latch)	No	2
HANDLES, ETC.			
Aluminium Pull Handle			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	2.0
SUNDRIES			
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	2	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	1	
69	32mm Type 8 side grab rail 900mm girth plugged	No	1	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No		
71	DSS-131 Engraved "Female" information sign, plugged	No	1	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No		
73	DSS-133 Engraved "Disabled" information sign, plugged	No		
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	10	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2	
Carried Forward				R
S12 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	WELDED SCREENS, GATES, ETC			
	Gates to external doors			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
	PRESSED STEEL DOOR FRAMES			
	1,2mm Double rebated frames suitable for half brick walls			
78	Frame for door size 813 x 2032mm high	No	2	
	1,2mm Double rebated frames suitable for one brick walls			
79	Frame for door size 813 x 2032mm high	No	12	
	STEEL WINDOWS, DOORS, ETC			
	Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
80	Window type NE1, size 533 x 654mm high	No	13	
81	Window type NE7, size 1022 x 654mm high	No	6	
	Sundries			
	Carried Forward			R
	S12 + D WATERBORNE			
	R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
GRANOLITHIC			
Untinted granolithic on concrete			
83	20mm Thick on floors	m2	57
INTERNAL PLASTER			
Cement plaster on brickwork or blockwork			
84	On internal plastered walls	m2	142
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO. 4</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	15
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	7
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	13
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	
PRECAST CONCRETE WASH HAND TROUGH			
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
Rainwater tank, etc.			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
Extra over uPVC pipes for fittings			
97	110mm Bend	No	8
98	110mm Junction	No	9
uPVC gulleys			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	7
WASTE UNIONS ETC			
Carried Forward			R
S12 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

	Brought Forward			R	
	"Cobra Watertech"				
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7		
	TRAPS ETC				
	"Cobra Watertech"				
101	Cobra Ref. 365/40" CP bottle trap	No	1		
	Marley				
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1		
	TAPS, VALVES, ETC				
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	2		
	SANITARY PLUMBING				
	uPVC pipes				
105	50mm Pipes	m	50		
	Extra over uPVC pipes for fittings				
106	50mm Bend	No	13		
107	50mm Access bend	No	7		
108	50mm Junction	No	7		
	WATER SUPPLIES				
	Carried Forward			R	
	S12 + D WATERBORNE				
	R MAHANGE & ASSOCIATES				

		Brought Forward			R	
		Class 0 copper pipes				
109	15mm Pipes	m	50			
110	22mm Pipes	m	50			
		Extra over class 0 copper pipes for capillary fittings				
111	15mm Fittings	No	28			
112	22mm Pipes	No	28			
		SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26			
114	Ditto, but in hard rock	m3	6			
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	16			
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22			
		TESTING				
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item		
		Carried Forward			R	
	S12 + D WATERBORNE					
	R MAHANGE & ASSOCIATES					

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 4</u></p> <p><u>BILL NO. 12</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>S12 + D WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 5</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
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			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R	
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	109	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	109	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	29	
4	Thickening under aprons	m3	1	
Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	4	
6	Hard rock	m3	2	
Carried Forward			R	
M6 WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	25		
	Risk of collapse of excavations				
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	124		
	Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
10	Under floors, steps, paving, etc	m3	11		
11	Backfilling to trenches, holes, etc	m3	11		
	Compaction of surfaces				
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	71		
	Under floors, steps, paving, etc.				
	Prescribed density tests on filling				
13	Modified AASHTO Density	No	9		
	SOIL POISONING				
	Weedkiller mixed in accordance to supplier's specifications				
14	To bottoms and sides of trenches, etc.	m2	126		
	Carried Forward			R	
	M6 WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2
25MPa/19mm concrete			
19	Strip footings	m3	7
REINFORCED CONCRETE			
25MPa/19mm concrete			
20	Surface beds	m3	4
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	32
TEST CUBES			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
CONCRETE SUNDRIES			
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

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		Brought Forward			R
		<u>SECTION NO. 5</u>			
		<u>BILL NO. 3</u>			
		<u>MASONRY</u>			
		For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
		SUPPLEMENTARY PREAMBLES			
		BRICKWORK			
		Sizes in descriptions			
		Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
		Face bricks			
		Bricks shall be ordered timeously to obtain uniformity in size and colour			
		Pointing			
		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
		FOUNDATIONS (PROVISIONAL)			
		Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	29		
29	Half brick walls	m2	8		
	FACE BRICKWORK				
		Carried Forward			R
	M6 WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	7
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	35
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	89
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward				R
<u>SECTION NO. 5</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
ROOFS, ETC.				
Sawn softwood grade 6				
52	76 x 38mm Wall plates	m	19	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	51	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	73	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	73	
Sundries				
56	Two coats creosote on sawn timbers	m2	27	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	44	
58	Hurricane clips	No	44	
EAVES, VERGES, ETC				
Pressed fibre-cement:				
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	43	
Carried Forward				R
M6 WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2
LOCKS			
Approved			
63	Three lever mortice lock set	No	2
64	Indicator lock set	No	6
65	Security double throw dead lock (no latch)	No	2
HANDLES, ETC.			
Aluminium Pull Handle			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	2.0
SUNDRIES			
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	2	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	2	
69	32mm Type 8 side grab rail 900mm girth plugged	No	2	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No	2	
71	DSS-131 Engraved "Female" information sign, plugged	No		
72	DSS-132 Engraved "Male/Female" information sign, plugged	No		
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	6	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2	
Carried Forward				R
M6 WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
WELDED SCREENS, GATES, ETC			
Gates to external doors			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
PRESSED STEEL DOOR FRAMES			
1,2mm Double rebated frames suitable for half brick walls			
78	Frame for door size 813 x 2032mm high	No	6
1,2mm Double rebated frames suitable for one brick walls			
79	Frame for door size 813 x 2032mm high	No	2
STEEL WINDOWS, DOORS, ETC			
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
80	Window type NE1, size 533 x 654mm high	No	9
81	Window type NE7, size 1022 x 654mm high	No	4
Sundries			
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	11
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
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4
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	6
Carried Forward			R
M6 WATERBORNE			
R MAHANGE & ASSOCIATES			

	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		
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	6	
PRECAST CONCRETE WASH HAND TROUGH				
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	1	
Rainwater tank, etc.				
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1	
SOIL DRAINAGE				
uPVC pipes				
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30	
Extra over uPVC pipes for fittings				
97	110mm Bend	No	8	
98	110mm Junction	No	8	
uPVC gulleys				
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5	
WASTE UNIONS ETC				
Carried Forward				R
M6 WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	"Cobra Watertech"				
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7		
	TRAPS ETC				
	"Cobra Watertech"				
101	Cobra Ref. 365/40" CP bottle trap	No	1		
	Marley				
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1		
	TAPS, VALVES, ETC				
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	13		
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	2		
	SANITARY PLUMBING				
	uPVC pipes				
105	50mm Pipes	m	50		
	Extra over uPVC pipes for fittings				
106	50mm Bend	No	13		
107	50mm Access bend	No	7		
108	50mm Junction	No	7		
	WATER SUPPLIES				
	Carried Forward			R	
	M6 WATERBORNE				
	R MAHANGE & ASSOCIATES				

Brought Forward				R
Class 0 copper pipes				
109	15mm Pipes	m	50	
110	22mm Pipes	m	50	
Extra over class 0 copper pipes for capillary fittings				
111	15mm Fittings	No	28	
112	22mm Pipes	No	28	
SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
114	Ditto, but in hard rock	m3	6	
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	16	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
TESTING				
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.		Item	
Carried Forward				R
M6 WATERBORNE				
R MAHANGE & ASSOCIATES				

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 5</u></p> <p><u>BILL NO. 12</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>M6 WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 6</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
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			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R	
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</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	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	30	
4	Thickening under aprons	m3	3	
Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	4	
6	Hard rock	m3	2	
Carried Forward			R	
MD6 WATERBORNE				
R MAHANGE & ASSOCIATES				

		Brought Forward			R	
		Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	21			
	Risk of collapse of excavations					
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	50			
	Keeping excavations free of water					
9	Keeping excavations free of all water other than subterranean water			Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density					
10	Under floors, steps, paving, etc	m3	11			
11	Backfilling to trenches, holes, etc	m3	14			
	Compaction of surfaces					
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	75			
	Under floors, steps, paving, etc.					
	Prescribed density tests on filling					
13	Modified AASHTO Density	No	9			
	SOIL POISONING					
	Weedkiller mixed in accordance to supplier's specifications					
14	To bottoms and sides of trenches, etc.	m2	120			
		Carried Forward			R	
	MD6 WATERBORNE					
	R MAHANGE & ASSOCIATES					

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Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
18	Surface blinding under footings and bases	m3	2
25MPa/19mm concrete			
19	Strip footings	m3	8
REINFORCED CONCRETE			
25MPa/19mm concrete			
20	Surface beds	m3	4
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	34
TEST CUBES			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
CONCRETE SUNDRIES			
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

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		Brought Forward			R
		<u>SECTION NO. 6</u>			
		<u>BILL NO. 3</u>			
		<u>MASONRY</u>			
		For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
		SUPPLEMENTARY PREAMBLES			
		BRICKWORK			
		Sizes in descriptions			
		Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
		Face bricks			
		Bricks shall be ordered timeously to obtain uniformity in size and colour			
		Pointing			
		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
		FOUNDATIONS (PROVISIONAL)			
		Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	30		
29	Half brick walls	m2	8		
	FACE BRICKWORK				
		Carried Forward			R
	MD6 WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 4</u>				
<u>WATERPROOFING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
DAMP-PROOFING OF WALLS AND FLOORS				
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
47	In walls	m2	7	
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
48	Under surface beds	m2	35	
FLOOR AND WALL SEALERS				
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight				
49	Around steel windows and door frames	m	89	
Carried Forward			R	
MD6 WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward				R
<u>SECTION NO. 6</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
ROOFS, ETC.				
Sawn softwood grade 6				
52	76 x 38mm Wall plates	m	21	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	36	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	79	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	137	
Sundries				
56	Two coats creosote on sawn timbers	m2	29	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
58	Hurricane clips	No	44	
EAVES, VERGES, ETC				
Pressed fibre-cement:				
59	15 x 230mm Nutek Fascias and barge boards including galvanised steel H-profile jointing strips	m	31	
Carried Forward				R
MD6 WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
LOCKS			
Approved			
63	Three lever mortice lock set	No	3
64	Indicator lock set	No	6
65	Security double throw dead lock (no latch)	No	3
HANDLES, ETC.			
Aluminium Pull Handle			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	3.0
SUNDRIES			
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	3	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	3	
69	32mm Type 8 side grab rail 900mm girth plugged	No	3	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No	1	
71	DSS-131 Engraved "Female" information sign, plugged	No		
72	DSS-132 Engraved "Male/Female" information sign, plugged	No		
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	6	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	3	
Carried Forward				R
MD6 WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 8</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	WELDED SCREENS, GATES, ETC			
	Gates to external doors			
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	
	PRESSED STEEL DOOR FRAMES			
	1,2mm Double rebated frames suitable for half brick walls			
78	Frame for door size 813 x 2032mm high	No	6	
	1,2mm Double rebated frames suitable for one brick walls			
79	Frame for door size 813 x 2032mm high	No	3	
	STEEL WINDOWS, DOORS, ETC			
	Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
80	Window type NE1, size 533 x 654mm high	No	9	
81	Window type NE7, size 1022 x 654mm high	No	4	
	Sundries			
	Carried Forward			R
	MD6 WATERBORNE			
	R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
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
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4
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	6
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

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	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	6
PRECAST CONCRETE WASH HAND TROUGH			
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	1
Rainwater tank, etc.			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
Extra over uPVC pipes for fittings			
97	110mm Bend	No	8
98	110mm Junction	No	8
uPVC gulleys			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
WASTE UNIONS ETC			
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
"Cobra Watertech"			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
TRAPS ETC			
"Cobra Watertech"			
101	Cobra Ref. 365/40" CP bottle trap	No	1
Marley			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
TAPS, VALVES, ETC			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	7
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	7
SANITARY PLUMBING			
uPVC pipes			
105	50mm Pipes	m	50
Extra over uPVC pipes for fittings			
106	50mm Bend	No	13
107	50mm Access bend	No	7
108	50mm Junction	No	7
WATER SUPPLIES			
Carried Forward			R
MD6 WATERBORNE			
R MAHANGE & ASSOCIATES			

		Brought Forward			R	
		Class 0 copper pipes				
109	15mm Pipes	m	50			
110	22mm Pipes	m	50			
		Extra over class 0 copper pipes for capillary fittings				
111	15mm Fittings	No	28			
112	22mm Pipes	No	28			
		SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26			
114	Ditto, but in hard rock	m3	6			
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	16			
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22			
		TESTING				
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item		
		Carried Forward			R	
		MD6 WATERBORNE				
		R MAHANGE & ASSOCIATES				

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 6</u></p> <p><u>BILL NO. 12</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>MD6 WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Brought Forward			R	
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	188	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	188	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	49	
4	Thickening under aprons	m3	4	
Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	6	
6	Hard rock	m3	3	
Carried Forward			R	
S12 WD-WATERBORNE				
R MAHANGE & ASSOCIATES				

		Brought Forward			R	
		Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	32			
	Risk of collapse of excavations					
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	78			
	Keeping excavations free of water					
9	Keeping excavations free of all water other than subterranean water			Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density					
10	Under floors, steps, paving, etc	m3	13			
11	Backfilling to trenches, holes, etc	m3	28			
	Compaction of surfaces					
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	84			
	Under floors, steps, paving, etc.					
	Prescribed density tests on filling					
13	Modified AASHTO Density	No	9			
	SOIL POISONING					
	Weedkiller mixed in accordance to supplier's specifications					
14	To bottoms and sides of trenches, etc.	m2	193			
		Carried Forward			R	
	S12 WD-WATERBORNE					
	R MAHANGE & ASSOCIATES					

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Brought Forward			R	
<u>SECTION NO. 7</u>				
<u>BILL NO. 2</u>				
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
UNREINFORCED CONCRETE, ETC.				
15MPa/19mm concrete				
18	Surface blinding under footings and bases	m3	3	
25MPa/19mm concrete				
19	Strip footings	m3	12	
REINFORCED CONCRETE				
25MPa/19mm concrete				
20	Surface beds	m3	8	
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	47	
TEST CUBES				
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0	
CONCRETE SUNDRIES				
Carried Forward			R	
S12 WD-WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
BRICKWORK			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
Face bricks			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Pointing			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
FOUNDATIONS (PROVISIONAL)			
Brickwork of NFP bricks in class II mortar			
28	One brick walls	m2	44
29	Half brick walls	m2	16
FACE BRICKWORK			
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	12
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	84
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	147
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
PROFILED METAL SHEETING AND ACCESSORIES			
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
50	Roof covering with pitch not exceeding 25 degrees	m2	98
ROOF AND WALL INSULATION			
51	12" Thermal resistance sisalation laid on purlins	m2	98
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
<u>SECTION NO. 7</u>				
<u>BILL NO. 6</u>				
<u>CARPENTRY AND JOINERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
ROOFS, ETC.				
Sawn softwood grade 6				
52	76 x 38mm Wall plates	m	34	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	75	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	124	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	75	
Sundries				
56	Two coats creosote on sawn timbers	m2	42	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
58	Hurricane clips	No	44	
EAVES, VERGES, ETC				
Pressed fibre-cement:				
59	15 x 230mm Nutek Fascias and barge boards including galvanised steel H-profile jointing strips	m	46	
Carried Forward				R
S12 WD-WATERBORNE				
R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
LOCKS			
Approved			
63	Three lever mortice lock set	No	3
64	Indicator lock set	No	12
65	Security double throw dead lock (no latch)	No	3
HANDLES, ETC.			
Aluminium Pull Handle			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	3.0
SUNDRIES			
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward				R
ASSA ABLOY				
67	38mm Diameter rubber door stop plugged	No	3	
Vaal Paragon				
68	32mm Type 9 back grab rail 800mm long plugged	No	3	
69	32mm Type 8 side grab rail 900mm girth plugged	No	3	
LETTERS, NAMEPLATES, ETC				
Dorma:				
70	DSS-130 Engraved "Male" information sign, plugged	No		
71	DSS-131 Engraved "Female" information sign, plugged	No		
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	1	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
74	SQ2 code 405607B white none lockable toilet roll holder	No	12	
stainless Steel				
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	3	
Carried Forward				R
S12 WD-WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
WELDED SCREENS, GATES, ETC			
Gates to external doors			
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
PRESSED STEEL DOOR FRAMES			
1,2mm Double rebated frames suitable for half brick walls			
78	Frame for door size 813 x 2032mm high	No	12
1,2mm Double rebated frames suitable for one brick walls			
79	Frame for door size 813 x 2032mm high	No	3
STEEL WINDOWS, DOORS, ETC			
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes			
80	Window type NE1, size 533 x 654mm high	No	15
81	Window type NE7, size 1022 x 654mm high	No	6
Sundries			
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 7</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	18
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
SANITARY FITTINGS			
"Vaal" or similar and approved			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	8
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
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	3
PRECAST CONCRETE WASH HAND TROUGH			
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
Rainwater tank, etc.			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
Extra over uPVC pipes for fittings			
97	110mm Bend	No	8
98	110mm Junction	No	8
uPVC gulleys			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
WASTE UNIONS ETC			
Carried Forward			R
S12 WD-WATERBORNE			
R MAHANGE & ASSOCIATES			

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		Brought Forward			R	
		Class 0 copper pipes				
109	15mm Pipes	m	50			
110	22mm Pipes	m	50			
		Extra over class 0 copper pipes for capillary fittings				
111	15mm Fittings	No	28			
112	22mm Pipes	No	28			
		SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26			
114	Ditto, but in hard rock	m3	6			
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	16			
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22			
		TESTING				
117	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item		
		Carried Forward			R	
	S12 WD-WATERBORNE					
	R MAHANGE & ASSOCIATES					

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 7</u></p> <p><u>BILL NO. 13</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>S12 WD-WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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Brought Forward			R	
<p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Soil poisoning</p> <p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	124	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	124	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3		
4	Pits	m3	42	
5	Thickening under aprons	m3	2	
Extra over trench and hole excavations in earth for excavation in				
6	Soft rock	m3	5	
7	Hard rock	m3	3	
Carried Forward			R	
S8 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward			R
Extra over all excavations for carting away			
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3 7	
Risk of collapse of excavations			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2 65	
Keeping excavations free of water			
10	Keeping excavations free of all water other than subterranean water	Item	
Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
11	Under floors, steps, paving, etc	m3 10	
12	Backfilling to trenches, holes, etc	m3 4	
Compaction of surfaces			
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2 24	
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (Enviro Loo Tanks Pit)	m2 13	
15	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2 33	
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R	
<u>SECTION NO. 8</u>				
<u>BILL NO. 2</u>				
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
UNREINFORCED CONCRETE, ETC.				
15MPa/19mm concrete				
23	Surface blinding under footings and bases	m3	2	
24	Aprons cast in panels to falls	m3	7	
25	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc.	m	31	
25MPa/19mm concrete				
26	Strip footings	m3	2	
27	Ramps	m3		
REINFORCED CONCRETE				
25MPa/19mm concrete				
28	Surface beds in pits	m3	5	
29	Extra over for thickening in pits for thickening size approximately 150mm deep, 500mm at top and tapering to 400mm at bottom, incl. all excavations, cart away, etc.	m	31	
Carried Forward			R	
S8 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	30Mpa/19mm concrete				
30	Surface beds cast in panels on waterproofing.	m3	5		
31	Slabs (pits)	m3	2		
	TEST CUBES				
32	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	10.0		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
33	Surface beds, slabs, etc	m2	39		
34	Surface beds, slabs, etc (pits)	m2	49		
35	Aprons to falls	m2	68		
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Smooth formwork to sides				
36	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	55		
	Permanent formwork to soffits				
37	Slabs propped up not exceeding 1,5m high	m2	15		
38	Form 500mm radius opening in floor slab	No	2		
	REINFORCEMENT (PROVISIONAL)				
	Mild steel reinforcement to structural concrete work				
39	8mm Diameter bars	t	1.00		
	Carried Forward			R	
	S8 + D WATERBORNE				
	R MAHANGE & ASSOCIATES				

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		Brought Forward			R
		<u>SECTION NO. 8</u>			
		<u>BILL NO. 3</u>			
		<u>MASONRY</u>			
		For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
		SUPPLEMENTARY PREAMBLES			
		BRICKWORK			
		Sizes in descriptions			
		Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
		Face bricks			
		Bricks shall be ordered timeously to obtain uniformity in size and colour			
		Pointing			
		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
		FOUNDATIONS (PROVISIONAL)			
		Brickwork of NFP bricks in class II mortar			
42	One brick walls	m2	16		
43	One brick walls in pits	m2	44		
		Carried Forward			R
	S8 + D WATERBORNE				
	R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	FACE BRICKWORK				
44	Extra over brickwork for face brickwork	m2	26		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
45	Half brick walls	m2	40		
46	Half brick walls in beamfilling	m2	7		
47	One brick walls	m2	88		
	FACE BRICKWORK				
48	Extra over brickwork for face brickwork	m2	88		
49	Extra over brickwork for brick-on-edge header course lintel	m	11		
50	110mm Wide sill set level and slightly projecting	m	11		
51	220mm Wide sill set sloping and slightly protecting outside	m	11		
52	Fair cutting fitting around pipe not exceeding 100mm	No	3		
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
54	75mm Wide reinforcement built in horizontally	m	185		
55	150mm Wide reinforcement built in horizontally	m	585		
	Carried Forward			R	
	S8 + D WATERBORNE				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 8</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
DAMP-PROOFING OF WALLS AND FLOORS			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
61	In walls	m2	6
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
62	Under surface beds	m2	67
63	Under aprons and ramps	m2	50
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
64	Around steel windows and door frames	m	85
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 8</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
ROOFS, ETC.			
Sawn softwood grade 6			
67	76 x 38mm Wall plates	m	24
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	78
69	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	69
Sundries			
70	Two coats creosote on sawn timbers	m2	30
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	25
72	Hurricane clips	No	30
EAVES, VERGES, ETC			
Pressed fibre-cement:			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	36
DOORS, ETC			
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 8</u>			
<u>BILL NO. 7</u>			
<u>IRONMONGERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
HINGES, BOLTS, ETC			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
CATCHES,CABIN HOOKS, ETC			
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
LOCKS			
Approved			
78	Three lever mortice lock set	No	3
79	Indicator lock set	No	8
80	Security double throw dead lock (no latch)	No	2
HANDLES, ETC.			
Aluminium Pull Handle			
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	3.0
SUNDRIES			
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
ASSA ABLOY			
82	38mm Diameter rubber door stop plugged	No	3
Vaal Paragon			
83	32mm Type 9 back grab rail 800mm long plugged	No	3
84	32mm Type 8 side grab rail 900mm girth plugged	No	3
LETTERS, NAMEPLATES, ETC			
Dorma:			
85	DSS-130 Engraved "Male" information sign, plugged	No	1
86	DSS-133 Engraved "Female" information sign, plugged	No	
BATHROOM FITTINGS			
Sundries			
Kimberley-Clark or Similar			
87	SQ2 code 405607B white none lockable toilet roll holder	No	3
stainless Steel			
88	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	2
89	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
<u>SECTION NO. 8</u>			
<u>BILL NO. 8</u>			
<u>METALWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
WELDED SCREENS, GATES, ETC			
Gates to external doors			
90	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	
91	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	
PRESSED STEEL DOOR FRAMES			
1,2mm Double rebated frames suitable for half brick walls			
92	Frame for door size 813 x 2032mm high	No	8
1,2mm Double rebated frames suitable for one brick walls			
93	Frame for door size 813 x 2032mm high	No	
94	Frame for door size 914 x 2032mm high	No	3
STEEL WINDOWS, DOORS, ETC			
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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Brought Forward			R	
<u>SECTION NO. 8</u>				
<u>BILL NO. 9</u>				
<u>PLASTERING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
GRANOLITHIC				
Untinted granolithic on concrete				
98	20mm Thick on floors	m2	65	
INTERNAL PLASTER				
Cement plaster on brickwork or blockwork				
99	On internal plastered walls(pits)	m2	166	
FLOOR AND WALLS SEALERS				
Minimum two coats approved epoxy coat:				
100	On floors in pits	m2	18	
101	On internal plastered walls in pits	m2	83	
Carried Forward			R	
S8 + D WATERBORNE				
R MAHANGE & ASSOCIATES				

Brought Forward			R
<u>SECTION NO. 8</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
102	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	14
103	Extra over eaves gutter for stopped end	No	2
104	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
105	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
106	Ditto .for shoe	No	2
SANITARY FITTINGS			
"Vaal" or similar and approved			
107	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required for disable toilets.	No	1
SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS			
108	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	9
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
109	Enviroloo two (3) Pan Urinal system complete (ABS) (FG-URI3PA/B3)	No	3
PRECAST CONCRETE WASH HAND TROUGH			
110	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	3
Rainwater tank, etc.			
111	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
112	110mm Pipes laid in and including trenches not exceeding 1m deep	m	35
Extra over uPVC pipes for fittings			
113	110mm Bend	No	6
114	110mm Junction	No	6
uPVC gulleys			
115	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
TRAPS ETC			
Marley			
116	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	4
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

Brought Forward			R
TAPS, VALVES, ETC			
117	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	10
118	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	4
SANITARY PLUMBING			
uPVC pipes			
119	50mm Pipes	m	35
Extra over uPVC pipes for fittings			
120	50mm Bend	No	4
121	50mm Access bend	No	4
122	50mm Junction	No	
WATER SUPPLIES			
Class 0 copper pipes			
123	15mm Pipes	m	35
124	22mm Pipes	m	35
Extra over class 0 copper pipes for capillary fittings			
125	15mm Fittings	No	12
126	22mm Pipes	No	12
Carried Forward			R
S8 + D WATERBORNE			
R MAHANGE & ASSOCIATES			

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<p style="text-align: right;">Brought Forward</p> <p><u>SECTION NO. 8</u></p> <p><u>BILL NO. 12</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>PAINTWORK ETC TO NEW WORK</p> <p>PREPARATORY WORK TO EXISTING WORK</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>ON FIBRE-CEMENT</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>S8 + D WATERBORNE</p> <p>R MAHANGE & ASSOCIATES</p>	<p style="text-align: right;">R</p>

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		Brought Forward			R
		<u>SECTION NO. 9</u>			
		<u>BILL NO. 2</u>			
		<u>ELEVATED WATER TANKS</u>			
		SUPPLIMENTARY PREAMBLES			
		For preambles see "Specification of materials and methods to be used-PW 371"			
		Excavation in earth not exceeding 2m deep			
16	Holes	m3	8		
	Extra over trench and hole excavations in earth for excavation in:				
17	Soft rock	m3	4		
18	Hard rock	m3	2		
	Extra over all excavations for carting away				
19	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	6		
	Risk of collapse of excavations				
20	Sides of trench and hole excavation not exceeding 1.5m deep	m2	16		
	Keep excavation free of water				
21	Keep excavation free of water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
22	Backfilling to trenches,holes ,etc	m3	2		
		Carried Forward			R
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	Soil insecticide				
23	To bottom and sides of trenches,etc	m2	24		
	One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions				
24	Under surface beds	m2	24		
	15Mpa/19mm concrete				
25	Blinding	m3	1		
	25Mpa/19mm concrete				
26	Bases	m3	6		
27	Platform surface beds cast in panels	m3	5		
	Finishing top surface of concrete smooth with a wood float				
28	Platform surface beds	m2	24		
	Finishing top surface of concrete smooth with a wood float				
29	On top of bases	m2	5		
	'Jojo" o equal approved SANS PVC water tanks				
30	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	1		
31	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	3		
	Galvanised medium normalised mild steel piping				
32	25mm Pipes	m	60		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

	Brought Forward			R	
33	50mm Pipes	m	102		
	Extra over galvanised medium normalised mild steel piping for fittings:				
34	25mm Fittings	No	10		
35	50mm Elbows	No	10		
36	50mm Union	No	10		
37	50mm Reducing bush	No	4		
	'Cobra Watertech" or other equal approved				
38	15mm 'Cobra Ref.108LK" brass hose bibtap	No	4		
39	50mm Fullway gate valve	No	4		
	The following in structural steel tank stands				
	Welded steel columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete				
40	80x80x6mm angle columns	t	1.49		
	Steel members and girth, bolted to steel				
41	30x30x6mm flat-bar	t	0.19		
42	40x40x5mm angle	t	0.19		
43	125x75x8mm unequal angle	t	0.22		
44	125x50x20x2mm Lipped channel	t	0.47		
	BOLTS, FASTENERS, ETC (LI)				
45	High tensile bolts	t	0.50		
	Carried Forward				
	EXTERNAL WORKS			R	
	R MAHANGE & ASSOCIATES				

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Brought Forward			R	
<u>SECTION NO. 9</u>				
<u>BILL NO. 3</u>				
<u>WATER FOUNTAINS</u>				
SUPPLIMENTARY PREAMBLES				
Earthworks				
Excavation in compacted building platform not exceeding 2m deep				
49	Trenches	m3	2	
Extra over all excavations for carting away				
50	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	6	
Compaction of surfaces				
51	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 AASTHO density	m2	2	
FILLING				
Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
52	Backfilling to trenches,holes ,etc	m3	1	
Concrete, etc				
25Mpa/19mm concrete				
53	Wall	m3	1	
Carried Forward			R	
EXTERNAL WORKS				
R MAHANGE & ASSOCIATES				

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Brought Forward				R
<u>SECTION NO. 9</u>				
<u>BILL NO. 4</u>				
<u>SEPTIC TANKS, ETC</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
61	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	
SITE CLEARANCE				
Site clearance				
62	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	40	
EXCAVATION, FILLING, ETC				
Excavation in earth exceeding 2m and not exceeding 4m deep				
63	Holes	m3	88	
Extra over all excavations for carting away				
64	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	32	
Carried Forward				R
EXTERNAL WORKS				
R MAHANGE & ASSOCIATES				

		Brought Forward			R	
		Risk of collapse of excavations				
65	Sides of trench and hole excavation not exceeding 1.5m deep	m2	58			
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density					
66	Backfilling to trenches,holes ,etc	m3	7			
	Keep excavation free of water					
67	Keep excavation free of water		Item			
	REINFORCED CONCRETE					
	15Mpa/19mm concrete					
68	15mpa blinding	m3	1			
	25Mpa/19mm concrete					
69	25Mpa in base	m3	7			
70	25Mpa in slabs over septic tank	m3	4			
71	Concrete haunch formed below pipes	m3	0.1			
	Finishing top surface of concrete smooth with a steel trowel					
72	Surface beds,slabs,etc to falls	m2	22			
	Permanent formwork to soffits					
73	Slab over septic tank	m2	22			
	Smooth formwork to form					
74	Opening not exceeding 1m girth through 170mm slab	No	2			
	SMOOTH FORMWORK (DEGREE OF ACCURACY 1)					
		Carried Forward			R	
	EXTERNAL WORKS					
	R MAHANGE & ASSOCIATES					

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		Brought Forward			R
		<u>SECTION NO. 9</u>			
		<u>BILL NO. 5</u>			
		<u>FRENCH DRAINS</u>			
		SITE CLEARANCE ETC			
		Site clearance			
89	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	20		
	Excavation in earth not exceeding 2m deep				
90	Holes	m3	15		
	Extra over trench and hole excavations in earth for excavation in:				
91	Soft rock	m3	1		
92	Hard rock	m3	1		
	Extra over all excavations for carting away				
93	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	8		
	Risk of collapse of excavations				
94	Sides of trench and hole excavation not exceeding 1.5m deep	m2	4		
	Keep excavation free of water				
95	Keep excavation free of water		Item		
		Carried Forward			R
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

	Brought Forward			R	
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
96	On top of french drain as soil cover	m3	7		
	FILTER FABRIC				
	'Kaytech Engineered Fabric' or similar approved laid in strict accordance to the manufacturer's instructions				
97	'Kaytech U14' or equal approved around stone filling in sub-soil drain trenches	m2	20		
	20mm Graded stone filling or similar approved				
98	In holes	m3	5		
	200-300mm Diameter clean washed stone filling or similar approved by Engineer				
99	In holes	m3	15		
	WATER PROOFING				
	One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions				
100	On top of pipes as protection of joints	m2	15		
	ROOF SHEETING				
	Roof sheeting				
101	On top of french drain	m2	15		
	uPVC Pipes				
102	110mm pipes laid in and including trenches	m	15		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 9</u>			
<u>BILL NO. 6</u>			
<u>WATER TANKS</u>			
SITE CLEARANCE ETC			
Site clearance			
106	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	62
EXCAVATION, FILLING, ETC			
Excavation in earth not exceeding 2m deep			
107	Trenches	m3	20
Extra over trench and hole excavations in earth for excavation in			
108	Soft rock	m3	5
109	Hard rock	m3	2
Extra over all excavations for carting away			
110	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10
Risk of collapse of excavations			
111	Sides of trench and hole excavations not exceeding 1,5m deep	m2	23
Keeping excavations free of water			
112	Keeping excavations free of all water other than subterranean water	Item	
Carried Forward			R
EXTERNAL WORKS			
R MAHANGE & ASSOCIATES			

	Brought Forward			R	
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
113	Backfilling to trenches, holes, etc	m3	7		
	SOIL POISONING				
	Soil poisoning mixed in accordance to supplier's specifications				
114	To bottoms and sides of trenches, etc.	m2	13		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
115	Strip footings	m3	9		
116	Platform surface beds cast in panels	m3	3		
	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
117	Surface beds, slabs, etc (rainwater tanks)	m2	31		
	REINFORCEMENT				
	Fabric reinforcement				
118	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	31		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

		Brought Forward			R	
		TEST CUBES				
119	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			
		BRICKWORK				
		Brickwork of NFP bricks in class II mortar				
120	One brick walls	m2	17			
		BRICKWORK SUNDRIES				
		Brickwork reinforcement				
121	150mm Wide reinforcement built in horizontally	m	50			
		FACE BRICKWORK				
		Face bricks (Purchase price of R5 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
122	Extra over brickwork for face brickwork	m	23			
		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				
123	Coping on top of one brick wall	m	50			
		WATERPROOFING				
		One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
124	Under surface beds	m3	31			
		Carried Forward			R	
		EXTERNAL WORKS				
		R MAHANGE & ASSOCIATES				

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Brought Forward			R
<u>SECTION NO. 9</u>			
<u>BILL NO. 7</u>			
<u>PAVED WALKWAYS</u>			
SUPPLEMENTARY PREAMBLES			
For preambles see "Specifications of materials and methods to be used - PW 371"			
Site Clearance			
129	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	410
130	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	410
Open face excavation in earth over sloping site			
131	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
Extra over all excavations for carting away			
132	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	150
Earth filling supplied by the contractor under parking areas, roadways, etc			
133	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	
	Compaction of surfaces				
134	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		
	Soil poisoning				
135	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrisien 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		
	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:				
136	Paving to toilet areas etc to falls	m2	410		
137	Fig. 12 kerbs to sides of paving	m	615		
138	15Mpa/19mm unreinforced concrete in haunching	m3	1		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE & ASSOCIATES				

Brought Forward			R
<u>SECTION NO. 9</u>			
<u>BILL NO. 8</u>			
<u>STORMWATER CONTROL</u>			
SUPPLEMENTARY PREAMBLES			
Earthworks			
For preambles see "Specifications of materials and methods to be used - PW 371"			
139	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	250
140	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, paving, etc	m3	35
141	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the	m3	35
Contractor.			
142	Extra over trench or hole for excavations in soft rock	m3	20
143	Extra over trench or hole for excavations in hard rock	m3	15
144	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
145	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 & ASSOCIATES			

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Brought Forward			R
<u>SECTION NO. 9</u>			
<u>BILL NO. 9</u>			
<u>FENCING</u>			
SUPPLEMENTARY PREAMBLES			
For preambles see "Specifications of materials and methods to be used - PW 371"			
Welded mesh fence			
150	1800mm High welded mesh fencing formed of 2.5 x 50mm galvanized welded mesh in long lengths, with three strands of 1.6mm galvanized steel wire at 150mm centres to and including four strings of 2.5mm galvanized steel binding wire stringed through holes and secured to straining bolts or posts ,10mm Diameter galvanized straining eye bolt 300mm long with nut and washer sawn off and bent after straining, 3150mm high, 50mm diameter x 2.8mm round mild steel intermediates posts with cover cap, Corner post formed of 100mm diameter x 3mm thick x 3150mm overall length steel post and 50mm Diameter x 2.6mm steel stays.	m	250
151	1800mm High and 900mm wide swing gate from 32mm diameter framework, all tube hot dipped galvanised after fabrication, with 50 x 50 x 2.5mm hot dipped galvanised welded mesh infill, fixed with heavy duty hinges to 100mm diameter x 3.5mm HDG corner posts, 2400mm long with standard type cap, 150 x 150 x 3mm base plate and casting into and including 500 x 500 x 600mm deep 20MPa concrete in ground, each corner post with off 32mm diameter x 2.5mm HDG stays at 45 degree angle, 50 x 50 x 2mm baseplate and casting into and including 300 x 300 x 300mm deep 20MPa concrete complete with all earthworks, trimmings and fixing	No	1
Carried to Summary			R
EXTERNAL WORKS			
R MAHANGE & ASSOCIATES			

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