

### **BILL OF QUANTITIES**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 1 - PRELIMINARIES</u></b>				
	<b><u>BILL NO. 1</u></b>				
	<b><u>PRELIMINARIES</u></b>				
	<b><u>NOTES</u></b>				
	The Principal Building Agreement, Edition 6.2 May 2018 published by the Joint Building Contracts Committee (JBCC), shall be the applicable building agreement, amended as hereinafter described.				
	The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities				
	Contractors are referred to the abovementioned 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 abovementioned documents				
	Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"				
	<b><u>PREAMBLES FOR TRADES</u></b>				
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained				
	Supplementary preambles as well as the Project Specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles				

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	The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles				
	<b><u>PRICING OF PRELIMINARIES</u></b>				

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	Should the contractor select Option A in terms of subclause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)				
	<b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b>				
	<b>Definitions</b>				
1	Clause 1.0 - Definitions and interpretation F:..... V:..... T:.....	Item	1,00		
	<b>Objective and preparations</b>				
2	Clause 2.0 - Offer acceptance and performance obligations F:..... V:..... T:.....	Item	1,00		
3	Clause 3.0 - Documents Delete clause 3.3 and replace it with the following clause: The contractor shall waive its lien or right of continuing possession of the works in favour of the employer. The waiver shall be according to the JBCC Waiver of Contractor's Lien form, and shall ensure that any selected or nominated subcontractors or contractor's domestic subcontractors, also waive their lien or right of continuing possession, in favour of the employer and sign the JBCC Waiver of Contractor's Lien form. F:..... V:..... T:.....	Item	1,00		
4	Clause 4.0 - Design responsibility F:..... V:..... T:.....	Item	1,00		
5	Clause 5.0 - Employer's agents F:..... V:..... T:.....	Item	1,00		

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6	Clause 6.0 - Contractor's site representative The Contractor shall not make any change to the management of the Works without the Principal Agent's written approval. Should the Principal Agent consider that the Contractor's representative appears to be incompetent, or act in an uncooperative or improper manner, he may instruct that the representative be removed from the Works and be replaced by a competent and cooperative person to the Principal Agent's satisfaction.F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7	Clause 7.0 - Compliance with laws and regulations Without limiting the generality of the provisions of clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 01 March 2014 issued in terms of the Occupational Health and Safety Act 1993, as amended. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specifications.F:..... V:..... T:.....	Item	1,00		
8	Clause 8.0 - Works risk V:..... F:..... T:.....	Item	1,00		
9	Clause 9.0 - Indemnities V:..... F:..... T:.....	Item	1,00		
10	Clause 10.0 - General insurancesF:..... V:..... T:.....	Item	1,00		
11	Clause 11.0 - Special insurancesF:..... V:..... T:.....	Item	1,00		
12	Clause 12.0 - Effecting insurancesF:..... V:..... T:.....	Item	1,00		
13	Clause 13.0 - Assignment F:..... V:..... T:.....	Item	1,00		
14	Clause 14.0 - SecurityF:..... V:..... T:.....	Item	1,00		
	<b>Execution</b>				

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15	Clause 15.0 - Preparation for and execution of the works F:..... V:..... T:.....	Item	1,00		
16	Clause 16.0 - Site and access F:..... V:..... T:.....	Item	1,00		
17	Clause 17.0 - Contract instructions Only the Principal Agent is empowered to resolve cost aspects of any matter pertaining to the Contract. In addition to the provisions of sub-clause 17.3, contract instructions are to be recorded in triplicate in a contract instruction book, which is to be supplied and maintained on site by the Contractor F:..... V:..... T:.....	Item	1,00		
18	Clause 18.0 - Setting out of the works The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments.F:..... V:..... T:.....	Item	1,00		
19	Clause 19.0 - Temporary works and plant F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
20	Clause 20.0 - Nominated subcontractors In addition to the provisions of sub-clause 20.1.2, the Contractor shall, at any time on being requested to do so by the Principal Agent, furnish a copy of the JBCC Nominated Sub-Contract Agreement to the Employer, within five (5) working days of such request F:..... V:..... T:.....	Item	1,00		
21	Clause 21.0 - Selected subcontractors F:..... V:..... T:.....	Item	1,00		
22	Clause 22.0 - Employer's direct contractors F:..... V:..... T:.....	Item	1,00		
23	Clause 23.0 - Contractor's domestic subcontractors In addition to the provisions of sub-clause 23.1, the Contractor shall, at any time on being requested to do so by the Principal Agent, furnish a copy of the Domestic Sub-Contract Agreement to the Employer, within five (5) working days of such request F:..... V:..... T:.....	Item	1,00		
	<b>Completion</b>				

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24	Clause 24.0 - Practical completion F:..... V:..... T:.....	Item	1,00		
25	Clause 25.0 - Works completion F:..... V:..... T:.....	Item	1,00		
26	Clause 26.0 - Final completion F:..... V:..... T:.....	Item	1,00		
27	Clause 27.0 - Latent defects liability period F:..... V:..... T:.....	Item	1,00		
28	Clause 28.0 - Sectional completion F:..... V:..... T:.....	Item	1,00		
29	Clause 29.0 - Revision of date for practical completion F:..... V:..... T:.....	Item	1,00		
30	Clause 30.0 - Penalty for late or non-completion F:..... V:..... T:.....	Item	1,00		
	<b>Payment</b>				
31	Clause 31.0 - Interim payment Notwithstanding this or any other clause, payment for unfixed materials on Site shall be at the sole discretion of the Principal Agent. Clause 31.4.2 is amended by adding the following: "Materials and goods stored off site shall not be included in the amount authorised for payment." Clause 31.9 is amended to read: "The Employer shall pay to the Contractor the amount certified in an interim payment certificate within thirty (30) calendar days of the date for issue of the payment certificate. Payment shall be subject to the Contractor giving the Employer a tax invoice for the amount due. F:..... V:..... T:.....	Item	1,00		

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
32	Clause 32.0 - Adjustment to the contract value .Notwithstanding the provisions of clause 32.13 or any other clause all fluctuations in costs shall be for the account of the contractor. See also clause 41.4.6 No qualification in respect of fluctuations in cost in respect of labour, plant, materials, preliminaries, etc., will be accepted. All fluctuations in cost - inter alia - of labour, materials, taxes (excluding Value Added Tax) exchange rates, transport charges, plant, overheads, etc., after the closing tenders shall be to the Contractor's account.Rates tendered shall remain fixed irrespective of any fluctuations in the value of the Works, and shall remain so for the duration of the Contract, and also for any extension of the Contract Period granted by the Principal Agent.Where prices are submitted by the contractor or n/s subcontractor 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 payment certificate, it shall be in writing.F:..... V:..... T:.....	Item	1,00		
33	Clause 33.0 - Recovery of expense and loss F:..... V:..... T:.....	Item	1,00		
34	Clause 34.0 - Final account and final payment Clause 34.10 is amended to read: "The Employer shall pay to the Contractor the amount certified for payment in the Final Payment Certificate within thirty (30) calendar days of the date of issue of the Final Payment Certificate, subject to Contractor giving the Employer a Tax Invoice for the amount due". F:..... V:..... T:.....	Item	1,00		
35	Clause 35.0 - Payment to other parties F:..... V:..... T:.....	Item	1,00		
	<b>Termination</b>				
36	Clause 36.0 - Termination by employer - contractor's default F:..... V:..... T:.....	Item	1,00		
37	Clause 37.0 - Termination by employer - loss and damage F:..... V:..... T:.....	Item	1,00		
38	Clause 38.0 - Termination by contractor - employer's default F:..... V:..... T:.....	Item	1,00		

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39	Clause 39.0 - Termination - cessation of the works F:..... V:..... T:.....	Item	1,00		
	<b>Dispute</b>				
40	Clause 40.0 - Settlement of disputes F:..... V:..... T:.....	Item	1,00		
	<b>Contract agreement</b>				
41	Clause 41.0 - Post tender provisions	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	The required post tender information shall be inserted in the post tender provisions after consultation with the contractor				
42	Clause 42.0 - Contractual agreement	Item	1,00		
	The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the contracting parties				
	<b><u>SECTION B - PRELIMINARIES</u></b>				
	<b>Definitions and interpretation</b>				
43	Clause 1.0 - Definitions and interpretation F:..... V:..... T:.....	Item	1,00		
	<b>Documents</b>				
44	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item	1,00		

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45	Clause 2.2 - Provisional bills of quantities 1. The work set out in these Bills of Quantities is provisional and the quantities and specifications do not purport to represent a final assessment of the work eventually required to be done. The quantities and specifications herein have been set down solely in order to form a basis for the obtaining of competitive tenders. 2. The Contractor shall be obliged, on instruction from the Principal Agent to execute such work as the Principal Agent in his sole discretion may consider necessary, whether or not such work is reflected in these Bills of Quantities or the Contract Drawings. 3. The value of work executed shall be determined by the Principal Agent by applying, or with reference to, the rates contained in the priced Bills of Quantities. The rates (or rates analogues to them) will be applied irrespective of changes to the scope or nature of the works instructed by the Principal Agent; and no claims for extras, variations, loss of profits; the basis for which is the use of any alternate method of pricing; will be entertained. 4. Provisional Sum Amounts, or Prime Cost Amounts may be replaced, reduced or omitted at the sole discretion of the Principal Agent, and no claim for loss of discount, profit, attendance mark-up percentage will be entertained. F:..... V:..... T:.....	Item	1,00		
46	Clause 2.3 - Availability of construction documentation The Tenderer shall together with his programme, submit the lead in periods for each area of sub-contract or independent activity. The Principal Agent shall, in his sole discretion determine the dates by which documentation should be prepared in order to meet the agreed construction programme. F:..... V:..... T:.....	Item	1,00		
	<b>Previous work and adjoining properties</b>				
47	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
48	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item	1,00		
49	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item	1,00		
	<b>Samples, shop drawings and manufacturer's instructions</b>				
50	Clause 4.1 - Samples of materials F:..... V:..... T:.....	Item	1,00		



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51	Clause 4.2 - Workmanship samples The Principal Agent may instruct the Contractor to prepare certain samples or "mock-ups" of works to be executed. Once the workmanship and materials in such a sample is approved by the Principal Agent, he shall be entitled to reject any workmanship that does not correspond with the approved simple.The Contractor shall submit the samples or prepare the Mock-ups within a reasonable time of the request, and allow sufficient time for their consideration.F:..... V:..... T:.....	Item	1,00		
52	Clause 4.3 - Shop drawings F:..... V:..... T:.....	Item	1,00		
53	Clause 4.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item	1,00		
	<b>Deposits and fees</b>				
54	Clause 5.1 - Deposits and fees F:..... V:..... T:.....	Item	1,00		
	<b>Temporary services</b>				
55	Clause 6.1 - Water F:..... V:..... T:.....	Item	1,00		
56	Clause 6.2 - Electricity F:..... V:..... T:.....	Item	1,00		
57	Clause 6.3 - Telecommunication facilities F:..... V:..... T:.....	Item	1,00		
58	Clause 6.4 - Ablution facilities F:..... V:..... T:.....	Item	1,00		
	<b>Prime cost amounts</b>				
59	Clause 7.1 - Responsibility for prime cost amounts F:..... V:..... T:.....	Item	1,00		
	<b>Special attendance on n/s subcontractors</b>				
60	Clause 8.1 - Special attendance F:..... V:..... T:.....	Item	1,00		
	<b>General</b>				

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61	Clause 9.1 - Protection of the works F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
62	Clause 9.2 - Protection/isolation of existing/sectionally occupied works F:..... V:..... T:.....	Item	1,00		
63	Clause 9.3 - Security of the works F:..... V:..... T:.....	Item	1,00		
64	Clause 9.4 - Notice before covering work F:..... V:..... T:.....	Item	1,00		
65	Clause 9.5 - Disturbance F:..... V:..... T:.....	Item	1,00		
66	Clause 9.6 - Environmental disturbance F:..... V:..... T:.....	Item	1,00		
67	Clause 9.7 - Works cleaning and clearing No claims for additional carting away of, or clearing of rubble of any description will be entertained. The Tenderer is to allow herein for all necessary cleaning; including a provision for cleaning waste not removed by sub-contractors. F:..... V:..... T:.....	Item	1,00		
68	Clause 9.8 - Vermin F:..... V:..... T:.....	Item	1,00		
69	Clause 9.9 - Overhand work F:..... V:..... T:.....	Item	1,00		
	<b>Schedule of variables</b>				
	Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract				
	10.1 - Provisional bills of quantities [clause 2.2] The quantities are provisional Yes				
	10.2 - Availability of construction documentation [clause 2.3] Construction documentation is complete No				

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	10.3 - Previous work - dimensional accuracy [clause 3.1]				
	10.4 - Previous work - defects [clause 3.2]				
	10.5 - Inspection of ad joining properties [clause 3.3]				
	10.6 - Water [clause 7.2] Option A (by contractor) Yes Option B (by employer - free of charge) No Option C (by employer - metered) No				
	10.7 - Electricity [clause 7.3] Option A (by contractor) Yes Option B (by employer - free of charge) No Option C (by employer - metered) No				
	10.8 - Telecommunications [clause 7.4] Telephone Yes Facsimile Yes E-mail Yes				
	10.9 - Ablution facilities [clause 7.5] Option A (by contractor) YesOption B (by employer) No				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	10.10 - Protection of the works [clause 9.1]				
	10.11 - Protection/isolation of existing/sectionally occupied works [clause 9.2] Protection/isolation is required Yes				
	10.12 - Disturbance [clause 9.5]				
	10.13 - Environmental disturbance [clause 9.6]				
	<b>SECTION C - SPECIFIC PRELIMINARIES</b>				
70	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	1,00		

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71	Warranties for material and workmanship Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, 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 warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion 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 to do so. The warranty 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 F:..... V:..... T:.....	Item	1,00		
72	Co-operation of contractor for cost management It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors F:..... V:..... T:.....	Item	1,00		
73	Testing of windows for watertightness Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
74	Testing of flat roof waterproofing for watertightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing F:..... V:..... T:.....	Item	1,00		
75	Non-Cession of Monies The Contractor shall not cede or assign his right or claims to any monies due to or to become due under this Contract. F:..... V:..... T:.....	Item	1,00		

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76	Proprietary Branded Products The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after construction with the manufacturer's authorised representative. F:..... V:..... T:.....	Item	1,00		
77	Overtime Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the Principal Agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the Employer. F:..... V:..... T:.....	Item	1,00		
78	Drawings on Site The Contractor shall maintain on Site at all times, a complete set of the latest revisions of the working drawings issued by the Architect, the Engineer, and the Electrical Consultant. F:..... V:..... T:.....	Item	1,00		
79	Labour Record At the end of each week the contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day. F:..... V:..... T:.....	Item	1,00		
80	Scaffolding No scaffolding is measured as these Bills of Quantities are based on the sixth edition of the Standard System for Measuring Building Work. However, the Tenderer is advised to study the drawings as scaffolding shall be required in certain areas for use by himself and selected/nominated subcontractors and the contractor must establish or otherwise required by him or selected/nominated subcontractor including taking down and re erecting as may be necessary and no claims whatsoever will be entertained. F:..... V:..... T:.....	Item	1,00		
81	Plant Record 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, currently used on the works. F:..... V:..... T:.....	Item	1,00		

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82	work cannot properly be measured or valued, the Contractor will be allowed daywork prices therefore calculated upon the costs defined hereunder together with the stated percentages. The total thus arrived at shall be the total amount recoverable by the Contractor for performing such work. 1. The costs to the Contractor or sub-contractor of materials, being the net cost (at current market prices) actually paid for such materials after the deduction of cash discounts or if materials are supplied from the Contractor's or sub-contractor's stock then the cost of such materials shall be based upon the current market price plus the cost of delivery to Site; to which net cost 7,5% thereof shall be added. 2. The cost of labour to the Contractor or sub-contractor, being all items of direct cost of labour actually remunerated to the workmen concerned which shall include the cost of all allowances in terms of the industrial Conciliation Act (where applicable) or any other wage determination applying in the area where the daywork is executed: to which labour cost 7,5% shall be added. Hourly base rates for labour shall be the current market rates for labour based upon standard working hours and shall be applied in respect of the time spent by workers directly engaged on the particular day works including any operators mechanical plant and transport and erecting and dismantling other plant. If a claim is made that individual workmen have been paid wages and allowances in excess of the minimum legalised rates, then proof must be furnished that such workmen had been so paid prior to the commencement of the daywork referred to. 3. The rate for mechanical plant shall be commercial hire rates current at the time of executing the daywork and shall include fuel and insurance costs. The above percentages shall cover head office charges; Site staff including Site supervision; third party and Contractors workmen	Item	1,00		
83	Unauthorised Persons/Workmen on Premises The Contractor shall at all times strictly exclude all unauthorized persons from the site and shall set up notice boards to that effect. F:..... V:..... T:.....	Item	1,00		
84	Guarantees and Maintenance Instructions/Manuals The Contractor shall obtain and hand over to the Architect on Practical Completion, all relevant guarantees, any operating and maintenance manuals, data or instructions required by the Architect or provided by the Manufacturers, Suppliers, or Subcontractors. The Contractor shall ensure that all warranties and guarantees received are fully ceded to the Employer on Final Completion, failing which the release of the Construction Guarantee will be withheld until this is satisfactorily completed. F:..... V:..... T:.....	Item	1,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
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85	Shop Drawings The term "Shop Drawings" shall mean drawings, layout drawings, illustrations, schedules, performance charts, brochures, operating manuals, other data which are prepared by the Contractor or Sub-contractor, Manufacturer, Supplier or Distributor and which illustrate some portion of the work. The Contractor shall ensure that all shop drawings required for the work in terms of this Contract, all selected/nominated Subcontracts and/or Architect's instructions, are prepared and submitted timeously in accordance with the following procedure: (a) Three prints of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules shall be submitted to the Architect for approval. Such work shall not be carried out until such approval has been given. (b) Shop drawings shall be submitted to the Architect for approval at least two weeks prior to the date on which such approval is required in order to comply with the Contract Programme. (c) All submissions shall be prepared in accordance with the Contract Drawings and specifications and/or any Architect's instructions and any deviation shall be specifically highlighted in writing, with a detailed explanation of the reason for such deviation, together with any cost and/or time implication. Delays in approval of shop drawings due to non-compliance with drawings, specifications and/or Architect's instructions shall not constitute grounds for any claims for delays. F:..... V:..... T:.....	Item	1,00		
86	Location of Temporary Buildings and Temporary Services The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding, and services, etc., required for his own Sub-contractors use during the construction and maintenance period. There is no guarantee given or implied that site conditions will be such that the Contractor will be able to erect such offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith. F:..... V:..... T:.....	Item	1,00		
87	Removal and Making Good of Temporary Works, etc. on Completion The Contractor shall remove all temporary works, roads, services and the like used for this contract and shall make good to the entire satisfaction of the Architect any damages resulting therefrom. F:..... V:..... T:.....	Item	1,00		
88	Indemnities Indemnities shall be sought by the Architect from all Contractors and Sub-contractors undertaking any design responsibility. F:..... V:..... T:.....	Item	1,00		

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89	Cost of Claims Costs incurred by the Contractor in the preparation of claims accepted by the Principal Agent shall be borne by the Contractor. F:..... V:..... T:.....	Item	1,00		

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90	Overloading The Contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works. The Contractor shall submit details of his proposed loading, storage, plant, erection, etc., to the Architect for their approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the Engineer's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the Contractor at his sole expense. F:..... V:..... T:.....	Item	1,00		
91	Commodities to be New All commodities, goods, articles or materials throughout the building are to be new except where reuse of existing is specified and are to be handled, stored, used and/or fixed with care to ensure that they are in perfect condition when incorporated into the works and thereafter properly protected so as to ensure that they are likewise in perfect condition when handed over at completion of the works. F:..... V:..... T:.....	Item	1,00		
92	Media Release All rights of publication of articles in the media, together with any advertising relating to, or in any way connected with this project shall vest in the Employer. The Contractor, together with his Sub-contractors shall not, without the written consent of the Employer, cause any statement or advertisement to be printed, screened or aired by the media. F:..... V:..... T:.....	Item	1,00		
93	Environmental Management Plan The contractor shall take all necessary measures to comply with the Environmental Management Plan (EMP) and make adequate provision to accommodate the requirements of the EMP. F:..... V:..... T:.....	Item	1,00		
94	Transformation and Empowerment Requirements The contractor shall take all necessary measures to comply with the document titled: Empowerment Breakdown of 15 point, compiled by Joburg Property Company, and make adequate provision to accommodate the requirements relating to job creation, job intensity, training and development, local SMME utilisation, local material utilisation, enterprise development, etc. as detailed in the above document F:..... V:..... T:.....	Item	1,00		



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	<b><u>SUMMARY OF CATEGORIES</u></b>				
	Category : Fixed ..... Category : Value .....Category : Time .....				
	<b>Total Carried to Summary Section 2</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2 - BUILDING WORKS</u></b>				
	<b><u>BILL NO. 1</u></b>				
	<b><u>ALTERATIONS</u></b>				
	<b><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b>Site inspection</b>				
	The Tenderer is advised to visit the site, inspect the existing premises and acquaint himself thoroughly with the nature of the work specified.				
	<b>Materials</b>				
	Old materials from alterations, except where described to be reused or handed over, become the property of the contractor.				
	Old materials from the alterations, except where described to be re-used or handed over, as well as all rubbish, etc., must be regularly carted from the site and not be allowed to accumulate on or around the site.				
	<b>General</b>				
	Allow for watering the works sufficiently to prevent nuisance from dust.				
	All alteration works described hereunder shall imply the use of an approved screed or plaster repairing compound and preparing existing surfaces to receive new.				
	Provide all necessary additional barricades, screens, overhead protections, etc., required to ensure the safety of persons, property, etc., and remove at completion.				

### **BILL OF QUANTITIES**

	All work is to take place on the roof of an existing, fully functional office. The contractor shall take utmost care to minimise disruption.				
	All work is to take place on and around an existing functional waterproofing system. Tenderers are advised that all work is to be carefully undertaken, so as not to damage the existing system.				
	Quantities do not allow for working space. Tenderers are advised to visit site and study the scope of works to establish the extent of working space required, and include such in their rates.				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	No scaffolding is measured as these Bills of Quantities are based on the sixth edition of the Standard System for Measuring Building Work. However, the Tenderer is advised to study the site conditions and allow for such scaffolding in the rates or preliminaries and general items as scaffolding will be required to access the area of works. Contractors will not be permitted to make use of any of the existing staircases or lift to transport materials, rubble, etc. up or down the building.				
	<b><u>REMOVAL OF EXISTING WORK</u></b>				
	<b>Demolish and remove:</b>				
	<b>Take out and remove doors, windows, etc. including thresholds, sills, etc. from brickwork to be demolished:</b>				
1	Single leaf door unit size overall 1626 x 2032mm high from one brick wall.	No	1,00		
	<b>Hack up/off, grinding and remove floor screed including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:</b>				
2	smooth, polished floors	m <sup>2</sup>	230,00		
	<b>Take out and remove existing plaster to expose brickwork and assess damages caused to the brickwork, etc. including making good floor and wall finishes (making good plastering, flooring and paintwork elsewhere):</b>				
3	damaged plaster work	m <sup>2</sup>	520,00		

**BILL OF QUANTITIES**

4	Removal of existing staircase rubbering and dispose	m	138,00		
	<b>BUILD UP OPENINGS</b>				
	<b>Brickwork in SABS approved NFP bricks in class II mortar in building up opening in:</b>				
5	One brick walls.	m <sup>2</sup>	5,00		
	<b>FINANCIAL PROVISION</b>				
6	Allow the amount of R10,000.00 for general alterations.	Item	1,00	R10 000,00	R10 000,00
7	Allow the amount of R 5000.00 for the removal of existing wooden planks at the access hatch on top of the tower	No	1,00	R5 000,00	R5 000,00
8	Allow the amount of R 5000.00 for the removal of damaged balustrades to replace with new durable balustrades	No	1,00	R5 000,00	R5 000,00
	<b>Total Carried to Summary Section 2</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 2</u></b>				
	<b><u>MASONRY</u></b>				
	<b><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u></b>				
	<b><u>BRICKWORK IN SUPERSTRUCTURE</u></b>				
	<b>Brickwork in burnt clay NFP bricks in 3:1 cement mortar:</b>				
1	One brick walls.	m <sup>2</sup>	5,00		
	<b><u>BRICKWORK SUNDRIES</u></b>				
	<b>Joint forming material in movement joints:</b>				
2	20mm Bitumen impregnated softboard built in vertically through brick walls	m <sup>2</sup>	0,80		
	<b>Brick reinforcement:</b>				
3	150mm Wide reinforcement built in horizontally.	m	78,00		

**BILL OF QUANTITIES**

	<b><u>SUNDRIES</u></b>				
	<b>Cleaning of walls</b>				
4	Clean existing brickwork and joints with a high pressure hose and cartaway all debris to a dumping site to be located by the Contractor, all in accordance with the Architect's instructions.	m <sup>2</sup>	520,00		
	<b>Total Carried to Summary Section 2</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 3</u></b>				
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
	NOTE: For Preambles see the Model Preambles for Trades 2008				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES, WALLS AND ROOF STRUCTURE</u></b>				
1	<b>25MPa/20mm Concrete</b>  Concrete access ladders	m3	6,5		
	<b><u>REINFORCEMENT (PROVISIONAL)</u></b>				
	<b>Fabric reinforcement</b>				
	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	8,64		
2					
	<b>Total Carried to Summary Section 2</b>				

**BILL OF QUANTITIES**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 4</u></b>				
	<b><u>CARPENTRY AND JOINERY</u></b>				
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u>				
	<b><u>DOORS</u></b>				
	Semi-solid flush doors:				
	40mm Thick door with hardwood concealed edge strips finished on both sides with commercial veneer and hung on steel frames (frames elsewhere):				
3	Door size overall 1626 x 2032mm high.	No	1,00		
	<b>Total Carried to Summary Section 2</b>				
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 5</u></b>				
	<b><u>METALWORK</u></b>				
	ALUMINIUM WINDOWS, DOORS, ETC				
	AAAMSA guide				
	Glass				
1	Purpose made balastrades, as per specialist specification.	No	12,00		
	<b>Total Carried to Summary Section 2</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 6</u></b>				
	<b><u>PLASTERING</u></b>				
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u>				
	<b><u>INTERNAL PLASTER</u></b>				

### BILL OF QUANTITIES

	One coat cement plaster minimum 15mm thick finished smooth with a wood float for tiling including all labours on brickwork:				
1	On walls, part on concrete.	m <sup>2</sup>	520,00		
2	In narrow widths.	m <sup>2</sup>	26,00		
	One coat cement plaster minimum 15mm thick finished smooth with a steel float including all labours on brickwork:				
3	On walls, part on concrete.	m <sup>2</sup>	50,00		
4	In narrow widths.	m <sup>2</sup>	2,00		
	<b>Total Carried to Summary Section 2</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 2</u></b>				
	<b><u>BILL NO. 7</u></b>				
	<b><u>PAINTWORK</u></b>				
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u>				
	<b><u>PLASTER</u></b>				
	Prepare and apply one coat similar to Plascon plaster primer and two coats similar to Plascon Double Velvet paint:				
1	Internal plastered walls, columns, recessed bands, etc.	m <sup>2</sup>	520,00		
	<b><u>METAL</u></b>				
	Prepare and apply one coat similar to similar to Plascon metal primer and two coats Plascon Velvagio paint:				
2	Frames and linings.	m <sup>2</sup>	7,00		
	<b><u>WOOD</u></b>				
	Sand down, prepare and apply one coat similar to Plascon wood primer and two coats similar to Plascon Velvagio paint:				
3	General surfaces of doors.	m <sup>2</sup>	35,00		

### BILL OF QUANTITIES

	<b>Total Carried to Summary Section 2</b>				
	<b><u>SECTION NO. 2 - BUILDING WORKS</u></b>				
	1 Alterations				
	2 Masonry				
	3 Concrete				
	4 Carpentry and Joinery				
	5 Metalwork				
	6 Plastering				
	7 Paintwork				
	<b>Total Carried to Final Summary</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 3 - EXTERNAL WORKS (STORMWATER MANAGEMENT)</u></b>				
	<b><u>BILL NO. 1</u></b>				
	<b><u>ALTERATIONS</u></b>				
	<b><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b>Site inspection</b>				
	The Tenderer is advised to visit the site, inspect the existing premises and acquaint himself thoroughly with the nature of the work specified.				
	<b>Materials</b>				
	Old materials from alterations, except where described to be reused or handed over, become the property of the contractor.				
	Old materials from the alterations, except where described to be re-used or handed over, as well as all rubbish, etc., must be regularly carted from the site and not be allowed to accumulate on or around the site.				
	<b>General</b>				
	Allow for watering the works sufficiently to prevent nuisance from dust.				

### **BILL OF QUANTITIES**

	All alteration works described hereunder shall imply the use of approved material, which will be subject to contractor submitting to responsible professional personnel.				
	Provide all necessary additional barricades, screens, protections, etc., required to ensure the safety of persons, property, etc., and remove at completion.				
	All work is to take place on Greenfields, fully functioning infrastructure. The contractor shall take utmost care to minimise disruption.				
	Quantities do not allow for working space. Tenderers are advised to visit site and study the scope of works to establish the extent of working space required, and include such in their rates.				
	No scaffolding is measured as these Bills of Quantities are based on the sixth edition of the Standard System for Measuring Building Work. However, the Tenderer is advised to study the site conditions and allow for such scaffolding in the rates or preliminaries and general items as scaffolding will be required to access the area of works. Contractors will not be permitted to make use of any of the existing staircases or lift to transport materials, rubble, etc. up or down the building.				
	<b><u>REMOVAL OF EXISTING WORK</u></b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b>Demolish and remove:</b>				
	<b><u>FINANCIAL PROVISION</u></b>				
	<b>Total Carried to Summary Section 3</b>				



### BILL OF QUANTITIES

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 3</u></b>				
	<b><u>BILL NO. 2</u></b>				
	<b><u>EARTHWORKS</u></b>				
	<b><u>(PROVISIONAL) NOTE:</u></b>				
	For Preambles see the Model Preambles for Trades 2008 edition published by the Association of South African Quantity Surveyors				
	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				
	<b><u>EARTHWORKS</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b><u>Nature of ground</u></b>				
	Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured				
	<b><u>Demolitions etc</u></b>				
	<b><u>Taking down and removing</u></b>				
	Concrete platform and concrete slab from existing pump houses				
1		m3	12,00		
	<b><u>Site clearance</u></b>				
	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bushes, etc and remove from site to a dumping site located by the contractor				
	Excavate and remove topsoil 150mm deep and deposit on site				
2		m3	78,00		
	<b><u>BULK EXCAVATION, FILLING, ETC</u></b>				
	<b><u>Open face excavation</u></b>				
	Not exceeding 2m deep				
		m3	1165,50		
	<b><u>Extra over bulk excavation in earth for excavation in</u></b>				
	Soft rock				
3		m3	333,00		
	Hard rock				
4		m3	166,50		

### BILL OF QUANTITIES

	<b>Risk of collapse of excavations</b>				
	Sides of bulk excavations not exceeding 1,5m deep				
5	<b>Extra over all excavations for carting away</b>	m3	135,00		

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	582,75		
	<b>Keeping bulk excavations free of water</b>				
7	Keeping excavations free of water	No	12,00		
	<b>Imported filling G5 material supplied by the contractor and compacted to 98% Mod AASHTO density in 150mm thick layers</b>				
8	To platforms	m3	1165,50		
	<b>Protection against termites</b>				
9	Poisoning surface of ground or filling under floors, steps, etc. including raking out 75mm deep V-shaped channels against the walls, etc. treating with poison solution, backfilling and ramming	m2	3700,00		
10	<b>Prescribed density tests on filling</b> Modified AASHTO Density test	No	12,00		
	<b>Total Carried to Summary Section 3</b>				

### BILL OF QUANTITIES

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SECTION NO. 3</u></b>				
	<b><u>BILL NO. 3</u></b>				
	<b><u>CONCRETE, CONCRETE PRAVED BRICKS</u></b>				
	NOTE:				
	For Preambles see the Model Preambles for Trades 2008 edition published by the Association of South African Quantity Surveyors				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	Cost of tests				
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)				
	Formwork				
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use.				
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
1		m2	82,18		
	Foundations, bases and footings				
	80mm thick 35 Mpa pre-cast concrete interlocking bricks paving of 220 x 97mm grey paving blocks in accordance with SANS 1058 laid to falls on and 20mm thick sand layer				
2		m2	3700,00		

### BILL OF QUANTITIES

3	with joints filled in with sand compacted with a vibration compactor	m2	82,18		
	Construct the pavement final layer using 80mm interlocking bricks laid to falls on and 20mm thick sand layer with joints filled in with sand compacted with a vibration compactor	m2	27,00		
	Allow for 20mm bedding using river sand				
	Construction of concrete edge beams and channels around edges of the paved area.				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b>CONCRETE CAST AGAINST EXCAVATED SURFACES</b>				
	<b>15MPa/20mm Concrete</b>				
	Surface blinding under footings and bases				
4	<b>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES, WALLS AND ROOF STRUCTURE</b>	m3	14,14		
	<b>25MPa/20mm Concrete</b>				
	<b>FIELD TESTING</b>				
	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	9,00		
10	<b>MOVEMENT JOINTS ETC</b>				
	10mm Softboard in vertical expansion joint not exceeding 300mm wide including out top section 10mm deep and filling with bituminous compound	m2	52,80		
11	<b>High tensile steel reinforcement to structural concrete work</b>				
	12mm Diameter bars		1,00		
12	<b>Fabric reinforcement</b>				
	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	36,00		
13					
	<b>Total Carried to Summary Section 3</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b>SECTION NO. 3</b>				

### BILL OF QUANTITIES

	<b><u>BILL NO. 4</u></b>				
	<b><u>PAINTWORK</u></b>				
	<b><u>ON PAVED SURFACE</u></b>				
	Prepare and apply one coat white reflective road marking paint on concrete paving bricks				
1	a) White lines (broken or unbroken) 100mm wide	m2	5,00		
	<b>Total Carried to Summary Section 3</b>				
	<b><u>SECTION NO. 3</u></b>				
1	Alterations				
2	Earthworks				
3	Concrete and Paved Work				
4	Paintwork				
	<b>Total Carried to Final Summary</b>				
	<b><u>SECTION NO. 4</u></b>				
	<b><u>BILL NO. 1</u></b>				
	<b><u>PROVISIONAL SUMS</u></b>				
	<b><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u></b>				
	The following sums and amounts are NETT.				
	Under no circumstances may any Provisional Sum or P.C Item be altered.				
	Unless a specific percentage mark up for attendance is indicated in the rate column, the amounts priced by the contractor for attendance against each Provisional Sum shall be deemed to be Lump Sum and shall not be adjusted unless the scope of the subcontract varies significantly.				
	Provisional Sums contained herein may be omitted or reduced at the employer's sole discretion and the contractor shall not be entitled to claim for any loss by way of reductions or omissions of any discount, or percentage relating to the Provisional Sums pr P.C Amounts or any loss of profit related thereto.				
	<b><u>ALLOW THE FOLLOWING PROVISIONAL SUMS</u></b>				
	<b>COMMUNITY LIAISON OFFICER</b>				

### BILL OF QUANTITIES

1	Provide the amount of R42 443.10 for the community liaison officer to be paid monthly over the duration of the project.	Item	6	R7 073,85	R42 443,10
2	Profit on above item.				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3	Attendance on ditto.				
	<b>COMMUNITY PARTICIPATION CONSULTANT</b>				
4	Profit on above item.				
5	Attendance on ditto.				
	<b>FIRE PROTECTION</b>				
6	Provide the amount of R80,000.00 for fire protection equipment installation executed complete.	Item	1,00	R80 000,00	R80 000,00
7	Profit on above item.				
8	Attendance on ditto.				
	<b>Total Carried to Final Summary</b>				
	<b>FINAL SUMMARY</b>				
1	SECTION 1 - PRELIMINARIES				
2	SECTION 2 - BUILDING WORKS				
3	SECTION 3 - EXTERNAL WORKS (STORMWATER MANAGEMENT)				
4	SECTION 4 - PROVISIONAL SUMS				
	<b>Sub-Total A</b>				
	<b>PART D - CONTINGENCY ALLOWANCE &amp; CPAP</b>				
	<b>Contingency Allowance</b>				
1	Include a risk sum of (Three Hundred and ninety eight thousand two hundred and fifty four rands and eight cents ) for contingency to be used in part or in full at the sole discretion of the project manager	5%			
	<b>CPAP Allowance</b>	2%			
2	Include a provisional sum of (One Hundred and Fifty Nine Thousand Three hundred and One Rand Sixty three cents) for contract price adjustments to be calculated in terms of the JBCC				

**BILL OF QUANTITIES**

	CPAP provision				
	Sub-Total D				

THLM-001						
	BILL	DESCRIPTION				
SECTION			UNIT	QUANTITY	RATE	AMOUNT
1	1	SECTION NO. 1				
1	1	BILL NO. 1				
1	1	PRELIMINARIES				
1	1	BUILDING AGREEMENT AND PRELIMINARIES				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3.				
		DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
1	1	QUANTITIES LOCATION.				
1	1	(CPAP WORK GROUP NO.190) unless otherwise stated				
1	1	EXECUTION				
1	1	A15				
		Clause 15.1 is amended by the addition of the following clause: 15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) calendar days of				
1	1	commencement date				
1	1	Clause 15.2.1 is amended by replacing it with the following clause:				
		Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.2 and 15.1.4 Fixed:_____ Value				
1	1	related:_____ Time related:_____	Item	1,00		
		<b>Total Carried to Summary</b>				



2	1	SECTION NO. 2				
2	1	BUILDING WORKS				
2	1	BILL NO. 1.				
2	1	EARTHWORKS				
		Notes: The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Sumplintery Preambles to Model Preambles will be granted.				
		3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	1	QUANTITIES LOCATION.				
2	1	(CPAP WORK GROUP NO.104) unless otherwise stated				
2	1	EXCAVATIONS				
2	1	Excavation in earth not exceeding 2m deep				
2	1	Trenches	m3	7,20		
2	1	Reduced levels	m3	7,20		
2	1	Extra over trench and hole excavations in earth for excavation in				
2	1	Soft rock	m3	4,00		
2	1	Hard rock	m3	4,00		
2	1	Extra over all excavations for carting away				
2	1	Surplus material from excavations and/or stock piles on site to a dumping site situated approximately 10km from the building site	m3	12,00		
2	1	Risk of collapse of excavations				
2	1	Sides of trench and hole excavations not exceeding 1,5m deep	m2	4,20		
2	1	Keeping excavations free of water				
2	1	Keeping excavations free of water other than subterreanean	Item	2,00		
2	1	FILLING ETC				
2	1	Earth filling obtained from the excavations and/ prescribed stockpiles on site compacted to 95% Mod ASSHTO density				
2	1	Backfilling to trenches,holes etc	m3	8,00		
2	1	Earth filling supplied by the contractor compacted to 95% Mod AASHTO density				
2	1	Under floors, steps, pavings etc	m3	8,00		
2	1	Prescribed density tests on filling				
2	1	"Modified AASHTO Density" test	No	4,00		
2	1	SOIL POISONING				

2	1	Soil insecticide				
		Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and				
2	1	ramming	m2	8,00		
2	1	To bottoms and sides of trenches etc	m2	4,20		
		<b>Total Carried to Summary</b>				
2	2	SECTION NO. 2				
2	2	BUILDING WORKS				
2	2	BILL NO. 2.				
2	2	CONCRETE, FORMWORKAND REINFORCEMENT				
2	2	CONCRETE				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	2	QUANTITIES LOCATION.				
2	2	(CPAP WORK GROUP NO.110) unless otherwise stated				
2	2	UNREINFORCED CONCRETE				
2	2	FOUNDATIONS				
2	2	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	2	15Mpa/20mm concrete				
2	2	Blinding	m3	0,80		
2	2	REINFORCED CONCRETE				
2	2	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	2	30MPa/20mm concrete				
2	2	Strip footings	m3	5,04		
2	2	30MPa/20mm concrete				
2	2	Surface beds cast in panels on waterproofing (elsewhere measured)	m3	3,20		
2	2	TEST CUBES				
2	2	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	4,00		
2	2	CONCRETE SUNDRIES				
2	2	Finishing top surfaces of concrete smooth with a power float				
2	2	Surface beds, slabs, etc	m2	16,00		

2	2	MOVEMENT JOINTS ETC				
2	2	Saw cut joints				
2	2	3 x 30mm deep saw cut joints on top of concrete	m	8,00		
2	2	REINFORCEMENT				
2	2	Mild steel reinforcement to structural concrete work				
2	2	8mm Diameter bars	t	0,50		
2	2	Type 245 fabric reinforcement in concrete surface beds, slabs, etc	m2	18,00		
		<b>Total Carried to Summary</b>				

2	3	SECTION NO. 2				
2	3	BUILDING WORKS				
2	3	BILL NO: 3.				
2	3	MASONRY				
		Notes: The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Sumplintery Preambles to Model Preambles will be granted.				
2	3	3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	3	QUANTITIES LOCATION.				
2	3	(CPAP WORK GROUP NO.118) unless otherwise stated				
2	3	FOUNDATIONS (PROVISIONAL)				
2	3	Brickwork of NFP bricks (4mpa minimum compressive strength) in class II mortar				
2	3	230mm brick walls	m2	7,20		
2	3	SUPERSTRUCTURE				
2	3	Brickwork of NFP bricks (14mpa minimum compressive strength) in class II mortar				
2	3	230 brick walls	m2	45,00		
2	3	Brickwork reinforcement				
2	3	150mm Wide reinforcement built in horizontally	m	128,00		
2	3	BRICK WORK SUNDRIES				
2	3	Joint forming material in movement joints				
2	3	12mm Bitumen impregnated fibre board built in vertically between brickwork and concrete surface bed	m2	11,20		
2	3	Pre-cast "Fabcon" prestressed fabricated lintels.				
2	3	220 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	12,00		

2	3	Galvanised hoop iron cramps, ties, etc				
2	3	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	40,00		
		<b>Total Carried to Summary</b>				
2	4	SECTION NO. 2				
2	4	BUILDING WORKS				
2	4	BILL NO. 4.				
2	4	WATERPROOFING				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	4	QUANTITIES LOCATION.				
2	4	(CPAP WORK GROUP NO.120) unless otherwise stated				
2	4	DAMPPROOFING OF WALLS AND FLOORS				
2	4	One layer of 375 micron "Consol Plastics Brikgrip DPC" or similar embossed damp proof course in				
2	4	In walls	m2	3,96		
2	4	One layer of 250 micron "Consol Plastics Gunplas USB Green" or similar waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	4	Under surface beds	m2	18,00		
		<b>Total Carried to Summary</b>				

2	5	SECTION NO. 2				
2	5	BUILDING WORKS				
2	5	BILL NO. 5.				
2	5	ROOF COVERINGS ETC				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	5	QUANTITIES LOCATION.				
2	5	(CPAP WORK GROUP NO.124) unless otherwise stated				
2	5	PROFILED METAL SHEETING AND ACCESSORIES				
2	5	Roof coverings				
		08mm "Sandstone Beige" galvanised steel sheeting with "Chromodek" or equivalent approved roof sheeting laid at 7 degrees slope on 50 x 76mm purlins laid on timber trusses all to engineer's designs laid at 1m centre to centre				
2	5	On roofs not exceeding 25 degrees pitch	m2	20,00		
2	5	Ridge covering with serrated closer 450mm girth	m	16,00		
2	5	Hip covering with serrated closer 550mm girth	m	16,00		
2	5	ROOF AND WALL INSULATION				
2	5	"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation				
2	5	25mm Sagex rigid ceiling insulation fixed to the underside of the roof sheet.	m2	20,00		
		<b>Total Carried to Summary</b>				
2	6	SECTION NO. 2				
2	6	BUILDING WORKS				
2	6	BILL NO. 6.				
2	6	METALWORK				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	6	QUANTITIES LOCATION.				
2	6	(CPAP WORK GROUP NO.136) unless otherwise stated				

2	6	DOOR FRAMES, DOORS, WINDOWS, ETC				
2	6	PRESSED STEEL DOOR FRAMES				
2	6	1,6mm Double rebated frames with steel doorsuitable for one brick walls				
2	6	1860 x 2125mm high	No	1,00		
		<b>Total Carried to Summary</b>				

2	7 SECTION NO. 2				
2	7 BUILDING WORKS				
2	7 BILL NO. 7.				
2	7 PLASTERING				
	Notes: The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Supplementary Preambles to Model Preambles will be granted.				
	3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	7 QUANTITIES LOCATION.				
2	7 (CPAP WORK GROUP NO.142) unless otherwise stated				
2	7 SCREEDS				
2	7 Screeds wood floated, on concrete				
2	7 100mm thick on floors and landings	m2	18,00		
2	7 INTERNAL PLASTER				
2	7 Cement plaster on brickwork				
2	7 On walls	m2	46,00		
2	7 On narrow widths not exceeding 300mm wide	m2	2,00		
	<b>Total Carried to Summary</b>				

2	8 SECTION NO. 2				
2	8 BUILDING WORKS				
2	8 BILL NO. 8.				
2	8 FLOORING				
	Notes: The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Sumplintery Preambles to Model Preambles will be granted.				
	3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	8 QUANTITIES LOCATION.				
2	8 (CPAP WORK GROUP NO.144) unless otherwise stated				
2	8 WALL TILING				
	200 x 200 x 5mm Thick "Johnson Matisse MWB4 Matt White" glazed ceramic wall tiles fixed with 'Tal Gold Star 6' rapid setting tile adhesive to plaster (elsewhere measured) with 2mm wide joints continuous in both directions with joints pointed with 'Tal				
2	8 Fine Epoxy Grout'				
2	8 On walls	m2	18,00		
2	8 On narrow widths not exceeding 300mm width	m2	5,00		
	<b>Total Carried to Summary</b>				



2	9	SECTION NO. 2				
2	9	BUILDING WORKS				
2	9	BILL NO. 9.				
2	9	PLUMBING AND DRAINAGE				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	9	QUANTITIES LOCATION.				
2	9	(CPAP WORK GROUP NO.148) unless otherwise stated				
2	9	RAINWATER DISPOSAL				
2	9	Seamless aluminium prepainted gutters and rainwater pipes				
		150 x 100mm Ogee eaves gutters in continous lengths on and including 32 x 2.5mm aluminium brackets at 1m centres fixed to				
2	9	falls to fibre cement fascia	m	8,00		
2	9	Extra over 100 x 125mm Ogee eaves gutter for stopped end	No	2,00		
2	9	Extra over 150 x 100 mm Ogee eaves gutter for outlet for 75 x 100mm pipe	No	1,00		
2	9	150mm diameter rainwater pipes	m	6,00		
2	9	Extra over 75 x 100mm rainwater pipe for bend	No	2,00		
2	9	Extra over 75 x 100mm rainwater pipe for shoe	No	2,00		
2	9	Extra over 75 x 100mm rainwater pipe for offsets	No	2,00		
		<b>Total Carried to Summary</b>				
2	14	SECTION NO. 2				
2	14	BUILDING WORKS				
2	14	BILL NO. 14.				
2	14	PAINTWORK				
		Notes:The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of QuantitiesNo claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplintery Preambles to Model Preambles will be granted3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF				
2	14	QUANTITIES LOCATION.				
2	14	(CPAP WORK GROUP NO.152) unless otherwise stated				

2	14	PAINTWORK, ETC TO NEW WORK ON				
2	14	ON FLOATED PLASTER				
		One coat plaster primer and two coats "Dulux" or similar Wax 'n				
		Wear adhesive promoted pure acrylic paint (Colour to be advised				
2	14	on site)				
2	14	On internal walls	m2	46,00		
2	14	On narrow widths	m2	2,00		
2	14	ON FLOATED PLASTER				
2	14	ON METAL				
		One coat zink phosphate, one coat universal undercoat and two				
2	14	coats high gloss enamel paint on galvanised steel				
2	14	On eaves gutters	m2	4,00		
2	14	On downpipes	m2	4,00		
2	14	One coat alkyd based undercoat on steel				
2	14	On backs of frames, linings, etc not exceeding 300mm wide	m2	4,00		
2	14	ON WOOD				
		One coat spik and span oil based wood primer UCS2 + two				
2	14	coats velvagio polyurethane enamel vlo				
2	14	On doors	m2	4,00		
		<b>Total Carried to Summary</b>				
2	15	EARTHWORKS	Page	61,00		
2	15	CONCRETE, FORMWORK AND REINFORCEMENT	Page	66,00		
2	15	MASONRY	Page	71,00		
2	15	WATERPROOFING	Page	74,00		
2	15	ROOF COVERINGS	Page	77,00		
2	15	METALWORK	Page	93,00		
2	15	PLASTERING	Page	96,00		
2	15	TILING	Page	100,00		
2	15	PLUMBING AND DRAINAGE	Page	106,00		
2	15	PAINTWORK	Page	113,00		
		<b>Total Carried to Final Summary</b>				

3	5	SECTION NO. 3				
3	5	EXTERNAL WORKS				
3	5	BILL NO. 1				
3	5	WATER SUPPLY				
		Notes: The Contractor must read each description throughout this bill of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Supplementary Preambles to Model Preambles will be granted.				
3	5	3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF QUANTITIES LOCATION.				
		Supply, lay test and bed HDPE pipes in 6m lengths; each pipe fitted at one end with socket for mechanical jointing				
3	5	Class 34, uPVC pressure pipes and fittings				
		110mm Diameter class 9 uPVC pipe including excavation and backfilling not exceeding 2m deep	m	50,00		
3	5	Extra over uPVC piping for				
3	5	75 x 75mm diameter tee	No	2,00		
3	5	110 x 90mm diameter tee	No	2,00		
3	5	110 x 90mm diameter bends	No	4,00		
3	5	75mm diameter end cap	No	1,00		
3	5	Filling, etc				
		Backfilling to trenches for selected blanket, maximum aggregate size 10mm compacted to 93% MOD AASHTO	m3	12,00		
3	5	Backfilling to trenches for selected bedding, maximum aggregate size 6mm compacted to 93% MOD AASHTO	m3	12,00		
3	5	Selected backfill to trenches, maximum aggregate size 63mm compacted to 93% MOD AASHTO	m3	12,00		
		Selected fill blanket, approved by the Principal Agent, obtained from the excavations stabilised with 4% cement mass backfilled 150mm thick under and around pipes in trenches not exceeding 150mm diameter and compacted to 90% Mod. AASHTO density	m3	8,00		
3	5	Sundries				
		Extra over excavation in earth for pipe trenches, etc. for carting away surplus material to a dumping site to be located by the contractor	m3	4,00		
3	5	Extra over risk of collapse for sides of trench excavation up to 1.5m deep	m2	8,00		
3	5	Allow for keeping excavations free from water and mud	Item	1,00		
3	5	Approved water meter and chamber complete	No	1,00		
		<b>Total Carried to Summary</b>				

3	6	WATER SUPPLY	Page	136,00		
		<b>Total Carried to Final Summary</b>				
4	1	SECTION NO. 4				
4	1	PROVISIONAL SUMS				
4	1	BILL NO. 1				
		Notes: The Contractor must read each description throughout this bills of quantities in conjunction with and in the context of the obligations, the Model Preambles for Trades (2008 Edition) and any supplementary Preambles to the Model Preambles forming part of these Bills of Quantities. No claims arising from brevity of description of items fully described in the said Model Preambles for Trades or Summplementary Preambles to Model Preambles will be granted.				
4	1	3. DEFINITION OF LOCATIONS AS USED IN THESE BILLS OF QUANTITIES LOCATION.				
4	1					
4	1		Item	1,00		
4	1	Profit	%IT	0,10		
4	1	Attendance	%IT	0,05		
		<b>Total Carried to Summary</b>				
5	1	PART A: BUILDING WORK				
5	1	SECTION NO. 1 - PRELIMINARIES	Page			
5	1	SECTION NO. 2 - BUILDING WORKS	Page			
5	1	SECTION NO. 3 - EXTERNAL WORKS	Page			
5	1	SECTION NO. 4 - PROVISIONAL SUMS	Page			
5	1	<b>Sub-total (A)</b>	<b>ST</b>			
5	1	PART C: MECHANICAL WORK				
5	1	Total brought forward from document titled PART C (excluding VAT)	Item	1,00	R10 000,00	
5	1	<b>Sub-total (B)</b>	<b>ST</b>			
5	1	PART D: COVID-19 EXPENSES				
5	1	Total brought forward from document titled PART D (excluding VAT)	Item	1,00	R10 000,00	
5	1	<b>Sub-total (D)</b>	<b>ST</b>			
5	1	PART E - CONTINGENCY ALLOWANCES				
5	1	Contingencies Include the risk sum for Contingency to be used in part or in full at the sole discretion of the Project Manager.	Ps	1		

Total Summary Bill		
Bill A	Fire Tower and Stormwater	
Bill B	Smoke Room	
SUB TOTAL		
ADD CONTINGENCIES AT 10%		
SUB TOTAL (1)		
ADD VAT @ 15%		
TOTAL		