

**PART I - ELECTRICAL INSTALLATION**

**SECTION 5 - BILLS OF QUANTITIES - BLOEMFONTEIN GOVERNMENT BUILDING: SARS**

**BILL NO: 1 - PRELIMINARY & GENERAL**

Item	Description	Unit	Quant	Rate (R)	Amount (R)
1A	<b>SECTION A</b>				
	<b>PRINCIPAL BUILDING AGREEMENT</b>				
1A-1	Definitions (A1) Clause 1.0 - Definitions and Interpretation The measuring system used for the preparation of the bills of quantities is the Standard System of Measuring Building Work (sixth edition, revised 1999) published by the Association of South African Quantity Surveyors [1.1]				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-2	Objective and preparations (A2 - A14) Clause 2.0 - Offer acceptance and performance obligations				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-3	The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any [3.9]				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-4	Clause 4.0 - Design responsibility				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-5	Clause 5.0 - Employer's agents				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-6	Clause 6.0 - Contractor's site representative				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-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, 2003 issued in terms of the Occupational Health and Safety Act, 1993. 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 [7.1]				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		

	Carried Forward	
--	-----------------	--

Carried Fixed	
Carried Variable Related	
Carried Time Related	

Brought Forward				
1A-8	Clause 8.0 - Works risk			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-9	Clause 9.0 – Indemnities			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-10	Clause 10.0 - General insurances			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-11	Clause 11.0 - Special insurances			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-12	Clause 12.0 - Effecting insurances			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-13	Clause 13.0 – Assignment			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-14	Clause 14.0 - Security			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
	Execution (A15 - A23)			
1A-15	Clause 15.0 - Preparation for and execution of the works			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
1A-16	Clause 16.0 - Site and access			
	i) Fixed	sum	1	
	ii) Variable Related	sum	1	
	iii) Time Related	sum	1	
Carried Forward				

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related		
Carried Fixed										
Carried Variable Related										
Carried Time Related										
		Brought Forward								
1A-17	Clause 17.0 - Contract instructions									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-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 [18.1].									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-19	Clause 19.0 - Temporary works and plant									
	Clause 19.1.1 - Hoardings with gantries, fans, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof all for the protection of the public and others or to meet the specific hoarding requirements of the employer.									
	Clause 19.1.2 - Office accommodation for meetings held on the site which shall be kept clean and fit for use at all times.									
	Clause 19.2 - All advertising rights on the site and the hoardings are reserved exclusively for the employer. Specific requirements of the employer are described in the priced document. The contractor shall provide and erect notice boards of an approved design as instructed by the principal agent. No individual boards or advertising material shall be allowed on the site without the principal agent's approval.									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-20	Clause 20.0 - Nominated subcontractors									
	Refer to the provisions on general attendance hereinafter									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-21	Clause 21.0 - Selected subcontractors									
	General attendance of n/s subcontractors for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for the execution of the relevant subcontract work.									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-22	Clause 22.0 - Employer's direct contractors									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
		Carried Forward								

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related		
Carried Fixed										
Carried Variable Related										
Carried Time Related										
		Brought Forward								
1A-23	Clause 23.0 - Contractor's domestic subcontractors									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
	Completion (A24 - A30)									
1A-24	Clause 24.0 - Practical completion									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-25	Clause 25.0 - Works completion									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-26	Clause 26.0 - Final completion									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-27	Clause 27.0 - Latent defects liability period									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-28	Clause 28.0 - Sectional completion.									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-29	Clause 29.0 - Revision of date for practical completion									
	The removal and replacement of materials and/or workmanship which do not conform to specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value (Clause 29.3).									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1A-30	Clause 30.0 - Penalty for late or non-completion									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
		Carried Forward								

		<div>Carried Fixed</div> <div>Carried Variable Related</div> <div>Carried Time Related</div>		
		Brought Forward		
1A-31	<div>Payment (A31 - A35)</div> <div>Clause 31.0 - Interim payment</div> <div>The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.4 shall be at the sole discretion of the principal agent such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable. [31.4.2, 31.6.5]</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-32	<div>Clause 32.0 - Adjustment to the contract value</div> <div>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [32.13]</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-33	<div>Clause 33.0 - Recovery of expense and loss</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-34	<div>Clause 34.0 - Final account and final payment</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-35	<div>Clause 35.0 - Payment to other parties</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-36	<div>Termination (A36 - A39)</div> <div>Clause 36.0 - Termination by employer - contractors' default</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-37	<div>Clause 37.0 - Termination by employer - loss and damage</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
1A-38	<div>Clause 38.0 - Termination by contractor - employer's default</div>			
	<div>i) Fixed</div> <div>ii) Variable Related</div> <div>iii) Time Related</div>	<div>sum</div> <div>sum</div> <div>sum</div>	<div>1</div> <div>1</div> <div>1</div>	
		Carried Forward		

Carried Fixed	
Carried Variable Related	
Carried Time Related	

		Brought Forward			
1A-39	Clause 39.0 - Termination - cessation of the works				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
	Dispute (A40)				
1A-40	Clause 40.0 - Settlement of disputes				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
	Contract variables (A41 - A42)				
1A-41	Clause 41.0 - Post tender provisions				
	The contractor is to complete before submission of his tender the JBCC Principal Building Agreement Contract Data CE				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1A-42	Clause 42.0 - Contractual agreement				
	The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the agreement for signature of the agreement by the parties				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
		Carried Forward			

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related			
Carried Fixed											
Carried Variable Related											
Carried Time Related											
				Brought Forward							
1B	SECTION B PRELIMINARIES										
	Definitions and interpretation (B1)										
1B-43	Clause 1.0 - Definitions and interpretation										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
	Documents (B2)										
1B-44	Clause 2.1 - Checking of documents										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1B-45	Clause 2.2 - Provisional bills of quantities										
	i)	Fixed	sum	0							
	ii)	Variable Related	sum	0							
	iii)	Time Related	sum	0							
1B-46	Clause 2.3 - Availability of construction documentation										
	The budgetary allowances, selected- and/or nominated subcontract amounts allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of selected- and/or nominated subcontractors during the construction period.										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
	Previous work and adjoining properties (B3)										
1B-47	Clause 3.1 - Previous work - dimensional accuracy										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1B-48	Clause 3.2 - Previous work – defects										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1B-49	Clause 3.3 - Inspection of adjoining properties										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
				Total							



		Carried Fixed Carried Variable Related Carried Time Related			
		Brought Forward			
1B-50	Samples, shop drawings and manufacturer's instructions (B4) Clause 4.1 - Samples of materials				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-51	Clause 4.2 - Workmanship samples				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-52	Clause 4.3 - Shop drawings				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-53	Clause 4.4 - Compliance with manufacturer's instructions				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
Deposits and fees (B5)					
1B-54	Clause 5.1 - Deposits and fees				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
Temporary services (B6)					
1B-55	Clause 6.1 – Water				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-56	Clause 6.2 – Electricity				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-57	Clause 6.3 - Telecommunication facilities				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
1B-58	Clause 6.4 - Ablution facilities				
	i) Fixed	sum	1		
	ii) Variable Related	sum	1		
	iii) Time Related	sum	1		
				<b>Total</b>	

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related		
Carried Fixed										
Carried Variable Related										
Carried Time Related										
				Brought Forward						
1B-59	Prime cost amounts (B7)									
	Clause 7.1 - Responsibility for prime cost amounts									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
1B-60										
	iii) Time Related	sum	1							
	Special attendance on n/s subcontractors (B8)									
	Clause 8.1 - Special attendance									
1B-61										
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1B-62	General (B9)									
	Clause 9.1 - Protection of the works									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
1B-63										
	iii) Time Related	sum	1							
	Clause 9.2 - Protection/isolation of existing/sectional occupied works									
	i) Fixed	sum	1							
1B-64										
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
	Clause 9.3 - Security of the works									
1B-65										
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1B-66	Clause 9.4 - Notice before covering work									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
1B-67	Clause 9.5 – Disturbance									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
	Clause 9.6 - Environmental disturbance									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							
	Clause 9.7 - Works cleaning and clearing									
	i) Fixed	sum	1							
	ii) Variable Related	sum	1							
	iii) Time Related	sum	1							

		<div>Carried Fixed</div> <div>Carried Variable Related</div> <div>Carried Time Related</div>		
		Brought Forward		
1B-68	Clause 9.8 – Vermin  i)      Fixed ii)     Variable Related iii)    Time Related	sum sum sum	1 1 1	
1B-69	Clause 9.9 - Overhand work  i)      Fixed ii)     Variable Related iii)    Time Related	sum sum sum	1 1 1	
			<b>Total</b>	

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related			
Carried Fixed											
Carried Variable Related											
Carried Time Related											
				Brought Forward							
1C	SECTION C SPECIFIC PRELIMINARIES										
1C-70	Site instructions Contract 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										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1C-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 final 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 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										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1C-72	Co-operation of contractor for cost management It is specifically agreed that the contractor accepts the obligation of assisting the 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										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
1C-73	Propping of floors below The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor										
	i)	Fixed	sum	1							
	ii)	Variable Related	sum	1							
	iii)	Time Related	sum	1							
				Total							

		<table><tr><td>Carried Fixed</td><td></td></tr><tr><td>Carried Variable Related</td><td></td></tr><tr><td>Carried Time Related</td><td></td></tr></table>		Carried Fixed		Carried Variable Related		Carried Time Related			
Carried Fixed											
Carried Variable Related											
Carried Time Related											
		Brought Forward									
1C-74	Testing of windows for water tightness Each window shall be tested for water tightness 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  i) Fixed ii) Variable Related iii) Time Related	sum sum sum	1 1 1								
1C-75	Testing of flat roof waterproofing for water tightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing  i) Fixed ii) Variable Related iii) Time Related	sum sum sum	1 1 1								
1C-76	Programme Clause for Tender Purposes. The following clause has been drafted by Le Roux Consulting (adapted from the Society of Construction Laws Delay and Disruption protocol: 2002) <sup>1</sup> to be included in the specification section of a projects tender documents. These requirements are suited for small, medium and large complex projects. Please note that the words and clauses in this must be reviewed and amended for each type of contract to ensure that it is consistent with the conditions of Agreement and the particular nature of the work to be executed. Do not reproduce or distribute without prior consent. Copyright Le Roux Consulting 2013. Society of Construction Law. 2002. Delay and Disruption Protocol. [online] [http://www.scl.org.uk/]  i) Fixed ii) Variable Related iii) Time Related	sum sum sum	1 1 1								
Total : Schedule 1 Preliminaries and General Carried forward to Summary of Schedules											
		Total									