

Item No	Quantity	Rate	Amount
<u>BILL NO. 1</u>			
<u>PRELIMINARIES AND GENERAL</u>			
<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
<p>The JBCC Principal Building Agreement (May 2018 Edition 6.2) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The errata listed under the Table of Contents on page 3 of the JBCC Principal Building Agreement are deemed to be included in the agreement.</p> <p>The JBCC Principal Building Agreement contract data form an integral part of this agreement</p> <p>The Preliminaries revision 1 (February 2016) published by the Association of South African Quantity Surveyors for use with the JBCC Principal Building Agreement Edition 6.2 shall be deemed to be incorporated in these bills of quantities, amended as hereinafter described</p> <p>The contractor is deemed to have referred to the above mentioned documents for the full intent and meaning of each clause</p> <p>The clauses in the above mentioned documents are hereinafter referred to by clause number and heading only</p> <p>Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable"</p>			
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<p style="text-align: right;">Brought Forward</p> <p><u>Pricing of Preliminaries</u></p> <p>Should the contractor select Option A in terms of sub-clause 26.9.4 in the Contract Data 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)</p> <p>Tenderers are advised any item left unpriced shall be deemed to have been included or allowed for elsewhere in the prices.</p> <p>Fixed (F) - A fixed amount, which shall not be varied</p> <p>Value-related (V) - An amount which shall be varied in proportion to the contract value</p> <p>Time-related (T) - An amount which shall be varied in proportion to the construction period</p> <p><u>PREAMBLES FOR TRADES</u></p> <p><u>User note</u></p> <p>The Model Preambles for Trades 2008 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</p> <p>Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the Model Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities shall take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles and/or specifications</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 1 Preliminaries and General</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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	<p style="text-align: right;">Brought Forward</p> <p><u>STRUCTURE OF THIS PRELIMINARIES BILL</u></p> <p>Section A : A recital of the headings of the individual clauses of the aforementioned JBCC Principal Building Agreement</p> <p>Section B : A recital of the headings of the individual clauses of the afore mentioned Preliminaries document</p> <p>Section C : Any special clauses to meet the particular circumstances of the project</p> <p><u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Interpretation (A1-A7)</u></p> <p>1 Clause 1.0 - Definitions and interpretation</p> <p>Definition of agreement</p> <p>The definition of agreement is replaced with the following definition :</p> <p>"AGREEMENT: The JBCC Principal Building Agreement, the completed JBCC PBA contract data, the contract drawings, the priced documents and any other documents reduced to writing and signed by the parties"</p> <p>Pricing of bills of quantities</p> <p>The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement. Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 1 Preliminaries and General</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p>Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained</p> <p>Prices for all construction equipment, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary</p> <p>Abbreviated descriptions</p> <p>The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice</p> <p>Legal status of contractor</p> <p>If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:</p> <ol style="list-style-type: none"> 1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement 2. These persons shall notify the employer of their leader who has authority to bind the contractor and each of these persons 3. The contractor shall not alter its composition or legal status without the prior written consent of the employer <p>F:..... V:..... T:.....</p>	Item		
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2	<p>Clause 2.0 - Law, regulations and notices</p> <p>User note</p> <p><i>Insert the following where a health and safety specification is <u>not</u> yet available</i></p> <p>Health and safety</p> <p>F:..... V:..... T:.....</p> <p>Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 Edition 19. 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 specification [2.1, 2.7.2 & 2.7.3]</p> <p>The contractor shall:</p> <ol style="list-style-type: none"> 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 3. Co-operate with the health and safety consultant in all respects 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 5. Conform to the conditions contained in the employer's health and safety specification 		
3	<p>Clause 3.0 - Offer and acceptance</p> <p>F:..... V:..... T:.....</p>	Item	
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4	<p>Clause 4.0 - Assignment and cession</p> <p>F:..... V:..... T:.....</p>	Item	
5	<p>Clause 5.0 - Contract documents</p> <p>Value Added Tax</p> <p>Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)</p> <p>Priced document as specification</p> <p>Clause 5.3 is deemed to be deleted</p> <p>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</p> <p>Electronic issue of drawings</p> <p>All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [5.5]</p> <p>Precedence</p> <p>Clause 5.6 is deemed to be deleted. The provisions of this Bill No. 1 (Preliminaries) shall take precedence over any other documents which constitute this agreement [5.6]</p> <p>F:..... V:..... T:.....</p>	Item	
6	<p>Clause 6.0 - Employer's agents</p> <p>Delegated authority</p> <p>The authority of the principal agent to issue contract instructions and perform duties for specific aspects of the works is delegated to agents as follows [6.2]</p>		
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7	<p>Clause 7.0 - Design responsibility</p> <p>F:..... V:..... T:.....</p> <p><u>Insurance and security (A8-A11)</u></p>	Item	
8	<p>Clause 8.0 - Works risk</p> <p>F:..... V:..... T:.....</p>	Item	
9	<p>Clause 9.0 - Indemnities</p> <p>F:..... V:..... T:.....</p>	Item	
10	<p>Clause 10.0 - Insurances</p> <p>F:..... V:..... T:.....</p> <p>The Contractor is to ensure that he is properly and adequately insured in respect of all risk, public liability, workmen and materials on site.</p>	Item	
11	<p>Clause 11.0 - Security</p> <p>Extension of waiver of lien</p> <p>The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10]</p> <p>F:..... V:..... T:.....</p> <p><u>Execution (A12 - A17)</u></p>	Item	
12	<p>Clause 12.0 - Duties of the parties</p> <p>Provisions of clauses 12.1.2 to 12.1.6 and 12.2.18</p> <p>Refer to the contract data, the Preliminaries document and "Section B : Preliminaries" of this Bill No. 1 with reference to the provisions of clauses 12.1.2 to 12.1.6 and 12.2.18 of the JBCC Principal Building Agreement</p>		
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<p style="text-align: right;">Brought Forward</p> <p>Office accommodation</p> <p>The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18]</p> <p>Notice board</p> <p>The contractor shall erect in a position by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as by the principal agent listing the names and logos of the employer, the contractor, and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18}</p> <p>Access to water, sewer, stormwater and electricity connections</p> <p>The employer is not in a position to identify access to water, sewer, stormwater and/or electricity connections to the site as may be suitable for the execution of the works. The contractor is to allow what he considers to be required and is to qualify his tender in detail in this regard, failing which it shall be taken that the contractor has allowed what will be required for the execution of the works. In such case no claims for additional cost or loss shall be entertained [12.1.5]</p> <p>Statutory and other notices</p> <p>The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay all deposits or fees in this regard [12.1.6]</p> <p>It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto</p> <p>F:..... V:..... T:.....</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 1 Preliminaries and General</p>	<p style="text-align: right;">R</p> <p style="text-align: right;">Item</p> <p style="text-align: right;">R</p>
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13	<p>Clause 13.0 - Setting out</p> <p>The contractor shall be responsible for the verification and protection of the location of all existing services. In the event that existing services are damaged by the contractor or sub-contractors then the damaged services shall be reinstated to the approval of the relevant authorities, all at the expense of the contractor</p> <p>F:..... V:..... T:.....</p>	Item	
14	<p>Clause 14.0 - Nominated subcontractors</p> <p>General attendance by the contractor upon n/s subcontractors 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 required by such subcontractor for the execution of the relevant subcontract works</p> <p>F:..... V:..... T:.....</p>	Item	
15	<p>Clause 15.0 - Selected subcontractors</p> <p>Refer to provisions on general attendance in previous clause 14.0 which shall apply equally to this clause</p> <p>F:..... V:..... T:.....</p>	Item	
16	<p>Clause 16.0 - Direct contractors</p> <p>Attendance on direct contractors</p> <p>In respect of direct contractors the contractor shall:</p> <p>1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials</p> <p>2. Allow the use of personnel welfare facilities, where provided</p>		
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17	<p>3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation</p> <p>4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1]</p> <p>F:..... V:..... T:.....</p>	Item
	<p>Clause 17.0 - Contract instructions</p> <p>Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor</p> <p>F:..... V:..... T:.....</p>	Item
	<u>Completion (A18 - A24)</u>	
18	<p>Clause 18.0 - Interim completion</p> <p>F:..... V:..... T:.....</p>	Item
	<p>Clause 19.0 - Practical completion</p> <p>F:..... V:..... T:.....</p>	Item
20	<p>Clause 20.0 - Sectional completion</p> <p>F:..... V:..... T:.....</p>	Item
	<p>Clause 21.0 - Defects liability period and final completion</p> <p>F:..... V:..... T:.....</p>	Item
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22	<p>Clause 22.0 - Latent defects liability period</p> <p>F:..... V:..... T:.....</p>	Item		
23	<p>Clause 23.0 - Revision of date for practical completion</p> <p>Substitution of materials and goods</p> <p>The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8, 23.1 & 2]</p> <p>F:..... V:..... T:.....</p>	Item		
24	<p>Clause 24.0 - Penalty for late or non-completion</p> <p>F:..... V:..... T:.....</p> <p>Payment (A25 - A27)</p>	Item		
25	<p>Clause 25.0 - Payment</p> <p>Materials and goods prematurely on site</p> <p>Materials and goods brought onto the site prematurely shall not be authorised for payment [25.3.2]</p> <p>Materials and goods stored off site</p> <p>Materials and goods stored off site shall be authorised for payment subject to a guarantee for advance payment being provided to the employer [25.3.2]</p> <p>Materials must be stored safely and protected against loss or damage</p> <p>Materials must be covered by insurance</p> <p>Fluctuations in costs</p> <p>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [25.3.4]</p>			
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	<p>Prices submitted</p> <p>Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement 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 certificate of final completion, it shall be in writing</p> <p>F:..... V:..... T:.....</p>	Item		
26	<p>Clause 26.0 - Adjustment of the contract value and final account</p> <p>Tenant installations/users requirements delayed</p> <p>There is a possibility that certain works related to tenant installations/users requirements may have to be delayed and may consequently not be executed prior to practical completion</p> <p>The employer reserves the right to omit such work without compensation to the contractor for loss of profit or any other loss which the contractor may suffer as a result of such omission</p> <p>Should the contractor be instructed to do so he shall execute this work under the conditions pertaining to this agreement on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the contractor and the principal agent and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of practical completion of the works.</p> <p>Cost of claims</p> <p>All costs incurred by the contractor in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6,7] from making a determination on costs</p>			
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	<p>The contractor shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6]</p> <p>F:..... V:..... T:.....</p>	Item
27	<p>Clause 27.0 - Recovery of expense and/or loss</p> <p>F:..... V:..... T:.....</p>	Item
	<u>Suspension and termination (A28 - A29)</u>	
28	<p>Clause 28.0 - Suspension by the contractor</p> <p>F:..... V:..... T:.....</p>	Item
29	<p>Clause 29.0 - Termination</p> <p>F:..... V:..... T:.....</p>	Item
	<u>Dispute resolution (A30)</u>	
30	<p>Clause 30.0 - Dispute resolution</p> <p>F:..... V:..... T:.....</p>	Item
31	<p>Contract data</p> <p>Payment of preliminaries</p> <p>Where Option B is applicable and the initial construction period is extended the monthly charge shall be recalculated on the same basis as was initially applied but taking into account the revised construction period and the amounts already paid to the contractor [CD26.0]</p>	
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	<p>Adjustment of preliminaries</p> <p>Where the adjustment of preliminaries is in terms of Option A, the construction period and the initial construction period shall be calculated in working days [CD 26.0]</p> <p>Where the adjustment of preliminaries is in terms of Option A, the breakdown of charges into three categories and, where applicable, the appointment of preliminaries amounts per section, shall be provided by the contractor in schedule form indicating which items in this Preliminaries Bill are priced and whether the are fixed, Value - related or Time - related or a combination of categories. Alternatively, the contractor may provide the breakdown described above by marking each amount in this Preliminaries Bill with a "F", "V", "T" to indicate Fixed, Value - Related or Time - related respectively. Should the contractor fail to provide the sectional apportionment within the period stipulated, the categorised amounts shall be prorated to the value of each section [CD 26.0]</p> <p>Where the adjustment of preliminaries is required in terms of Option B, the detailed breakdown of preliminaries amounts and, where applicable, the apportionment of preliminaries amounts per section, shall be provided by the contractor in an schedule form which separates, as a minimum, the administrative and supervisory staff, the use of construction equipment in terms of the programme, establishment and disestablishment charges, Insurances and Guarantees, site office costs and the like. Should the contractor fail to provide such information within the period stipulated, Option A shall apply [CD 26.0]</p>		
32	<p><u>Changes made to JBCC documentation</u></p> <p>It is specifically agreed that the note below calling for amendments to the standard JBCC Agreement to be listed in the space provided in the contract data or recorded in "the single referenced Annexure" shall not apply. Where standard clauses or alternatives are not entirely applicable to this agreement, modifications, corrections or supplements as will apply are given under each relevant clauses heading in this Preliminaries Bill and such amendments, modifications, corrections or supplements shall take precedence notwithstanding the note below and notwithstanding the provisions of clause 5.6 of the JBCC Principal Building Agreement.</p>		
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F:..... V:..... T:.....		Item		
<u>SECTION B: PRELIMINARIES</u>				
<u>Interpretation (B1)</u>				
33 Clause 1.1 - Definitions				
F:..... V:..... T:.....		Item		
34 Clause 1.2 - Interpretation				
F:..... V:..... T:.....		Item		
<u>Documents (B2)</u>				
35 Clause 2.1 - Checking of documents				
F:..... V:..... T:.....		Item		
36 Clause 2.2 - Provisional bills of quantities				
37 Clause 2.3 - Availability of construction information				
Budgetary allowances and provisional sums				
The budgetary allowances and/or provisional sums allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of subcontractors during the construction period				
F:..... V:..... T:.....		Item		
38 Clause 2.4 - Ordering of materials and goods				
F:..... V:..... T:.....		Item		
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<u>Previous work and adjoining properties (B3)</u>			
39	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item	
40	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item	
41	Clause 3.3 - Inspection of adjoining properties A photographic record must be handed over to the Principal Agent prior to commencing work on site F:..... V:..... T:.....	Item	
<u>The site (B4)</u>			
42	Clause 4.1 - Defined works area F:..... V:..... T:.....	Item	
43	Clause 4.2 - Handover of site in stages F:..... V:..... T:.....	Item	
44	Clause 4.3 - Enclosure of the works F:..... V:..... T:.....	Item	
45	Clause 4.4 - Geotechnical investigation F:..... V:..... T:.....	Item	
46	Clause 4.5 - Encroachments F:..... V:..... T:.....	Item	
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47	Clause 4.6 - Existing premises occupied F:..... V:..... T:.....	Item		
48	Clause 4.7 - Services - known F:..... V:..... T:.....	Item		
49	Clause 4.8 - Protection of trees and/or relevant natural features F:..... V:..... T:.....	Item		
<u>Management of contract (B5)</u>				
50	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item		
51	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item		
52	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item		
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	<u>Samples, shop drawings and manufacturer's instructions (B6)</u>			
53	<u>Samples, shop drawings and manufacturer's instructions (B6)</u> Clause 6.1 - Samples of materials Clause 6.1 is hereby amended by the addition of the following: The principal agent may reject any material or colours not corresponding with the samples. The samples shall be kept on site until completion of the works. Should any materials or items specified prove to be either unavailable, in poor supply or likely to cause delay to the works, the contractor shall notify the principal agent in sufficient time for suitable alternatives to be considered. Any claims for delays resulting from the contractor not conforming with the terms of this clause will not be entertained or allowed. F:..... V:..... T:.....	Item		
54	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item		
55	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item		
56	Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item		
	<u>Deposits and fees (B7)</u>			
57	Clause 7.1 - Deposits and fees F:..... V:..... T:.....	Item		
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<u>Attendance on subcontractors (B10)</u>		
63	<p>Clause 10.1 - General attendance</p> <p>General Attendance on N/S Subcontracts</p> <p>The following sub clauses are added:</p> <p>10.1.1 Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor.</p> <p>10.1.2 The provision of water and lighting and of single phase electric power to a position within 50 metres of the place where the subcontract work is to be carried out but excluding water, fuel and power for commissioning of any installation.</p> <p>10.1.3 The provision of an area for the subcontractor to establish temporary office accommodation and workshop and for the storage of plant and materials.</p> <p>10.1.4. The use of erected scaffolding belonging to the contractor, in common with others having the like right, as necessary to complete the works.</p> <p>10.1.5. The use, at reasonable times by arrangement of the contractor's erected hoisting equipment.</p> <p>F:..... V:..... T:.....</p>	Item
64	<p>Clause 10.2 - Special attendance</p> <p>F:..... V:..... T:.....</p> <p><u>General (B11)</u></p>	
65	<p>Clause 11.1 - Protection of the works</p> <p>F:..... V:..... T:.....</p>	Item
66	<p>Clause 11.2 - Protection/isolation of existing/sectionally occupied works</p> <p>F:..... V:..... T:.....</p>	Item
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67	<p>Clause 11.3 - Security of the works</p> <p>F:..... V:..... T:.....</p>	Item	
68	<p>Clause 11.4 - Notice before covering work</p> <p>F:..... V:..... T:.....</p>	Item	
69	<p>Clause 11.5 - Disturbance</p> <p>F:..... V:..... T:.....</p>	Item	
70	<p>Clause 11.6 - Environmental disturbance</p> <p>F:..... V:..... T:.....</p>	Item	
71	<p>Clause 11.7 - Works cleaning and clearing</p> <p>The contractor shall ensure that the roads, pavements, etc. leading to and around the site are kept free from obstruction, debris, etc. at all times. In no way shall the work on the site be the cause of any inconvenience or hindrance to traffic or pedestrians. The contractor shall be responsible to ensure that all vehicles leaving the site do not deposit earth, mud, debris, etc either by spillage or via the wheels on any roads.</p> <p>The contractor shall have no claim against the employer in the event that the contractor is held accountable by any local authority or police for any action such as overloading vehicles, causing damage to roads while carting goods and materials onto or away from the site, restrictions on masses or dimensions of loads, holding up traffic, etc.</p> <p>F:..... V:..... T:.....</p>	Item	
72	<p>Clause 11.8 - Vermin</p> <p>F:..... V:..... T:.....</p>	Item	
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73	<p>Clause 11.9 - Overhand work</p> <p>F:..... V:..... T:.....</p>	Item	
74	<p>Clause 11.10 - Tenant installations by direct contractors</p> <p>F:..... V:..... T:.....</p>	Item	
75	<p>Clause 11.11 - Advertising</p> <p>F:..... V:..... T:.....</p>	Item	
<u>Preliminaries schedule (B12)</u>			
76	<p>Information for completion of the preliminaries schedule</p> <p>Information necessary for elections and completion of those clauses contained in the preliminaries 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</p> <p>12.1 - Provisional bills of quantities [2.2]</p> <p>The quantities are provisional Yes</p> <p>12.2 - Availability of construction information [2.3]</p> <p>Construction documentation is complete Yes</p> <p>12.3 - Previous work - dimensional accuracy [3.1]</p> <p>The contractor is required to check the site for dimensional accuracy of the previous works, report thereon in detail possession of the site. Failure by the contractor to comply with the above shall deem the previous works to be correct, and this shall be the basis for adjustment to contract value.</p> <p>12.4 - Previous work - defects [3.2]</p> <p>not applicable</p>		
Carried Forward			R
<p>Bill No. 1 Preliminaries and General</p>			

<p style="text-align: center;">Brought Forward</p> <p>12.5 - Inspection of adjoining properties [3.3]</p> <p>Specific Requirements:</p> <p>The contractor shall make a photographic record of all adjoining/ existing properties, buildings, walls, boundary fences, roads, pavements, kerbs, etc that could be affected by the works and deliver same recorded on a CD to the principal agent.</p> <p>12.6 - Defined works area [4.1]</p> <p>12.7 - Handover of site in stages [4.2]</p> <p>12.8 - Enclosure of the works [4.3]</p> <p>12.9 - Geotechnical investigation [4.4]</p> <p>12.10 - Existing premises occupied [4.6]</p> <p>12.11 - Services - known [4.7]</p> <p>12.12 - Protection of trees and/or relevant natural features [4.8]</p> <p>12.13 - Water [8.1]</p> <p style="padding-left: 40px;">Option A (by contractor) No Option B (by employer - free of charge) No Option C (by employer - metered) Yes</p> <p>12.14 - Electricity [8.2]</p> <p style="padding-left: 40px;">Option A (by contractor) No Option B (by employer - free of charge) No Option C (by employer - metered) Yes</p> <p>12.15 - Ablution and welfare facilities [8.3]</p> <p style="padding-left: 40px;">Option A (by contractor) Yes Option B (by employer) No</p> <p>12.16 - Communication facilities [8.4]</p> <p>Specific Requirements: Contractor's account</p> <p style="text-align: center;">Carried Forward</p> <p>Bill No. 1 Preliminaries and General</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: right;">Brought Forward</p> <p>12.17 - Protection of the works [11.1]</p> <p>Specific Requirements: The Contractor shall be liable for all damages to adjoining properties and existing roads and pavement and must make good all damages to same at his own expense all to the satisfaction of the Principal Agent.</p> <p>12.18 - Protection/isolation of existing/sectionally occupied works [11.2]</p> <p style="padding-left: 40px;">Protection/isolation is required Yes</p> <p>12.19 - Disturbance [11.5]</p> <p>Specific Requirements: Minimising disturbanceAll work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority.</p> <p>Whilst the employer shall not impose restrictions upon the contractor's working hours, the contractor shall take all measures available to him in order to minimise noisy operations during business hours. Such measures will include, <i>inter alia</i>, the use of silent compressors and strict control of workmen.</p> <p>Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever.</p> <p>12.20 - Environmental disturbance [11.6]</p> <p>Controlling all forms of pollution</p> <p>The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due <i>inter alia</i> to noise, artificial light, wind-blown sand, dust, deposits of mud, etc.</p> <p>The contractor is to ensure that all roads which border the site and is used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 1 Preliminaries and General</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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Brought Forward		R	
F:..... V:..... T:.....	Item		
<u>SUPPLEMENTARY DOCUMENTATION</u>			
AS BUILT DRAWINGS			
77 The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineers drawings and are to be submitted to the principal agent and the structural engineer for their records.			
F:..... V:..... T:.....	Item		
<u>WARRANTIES FOR MATERIALS AND WORKMANSHIP</u>			
78 Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity 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 specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity 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 execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his ruling shall be final and binding.			
F:..... V:..... T:.....	Item		
Carried Forward		R	
Bill No. 1 Preliminaries and General			

Brought Forward		R	
SECTION C: SPECIFIC PRELIMINARIES			
ENCLOSURE OF WORKS.			
The contractor shall erect whatever other site enclosure, hoardings, access gates, etc. he deems necessary to maintain the security of the works, his temporary offices, stores, etc. and to protect the general public from accessing dangerous construction areas, and he shall maintain such enclosure during the course of the works and remove same prior to practical completion.			
F:..... V:..... T:.....		Item	
79	DEFINED WORKS AREA		
The area of the works to be occupied by the contractor, any restriction to the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site.			
F:..... V:..... T:.....		Item	
80	LABOUR RECORD		
At the end of each week the contractor shall provide the Principal Agent with written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all sub-contractors on the works each day			
F:..... V:..... T:.....		Item	
Carried Forward		R	
Bill No. 1 Preliminaries and General			

	Brought Forward		R	
81	EMPLOYMENT OF ILLEGAL WORKERS No illegal (migrant) workers may be employed or allowed on the site by any contractor or subcontractor. Precautions to prevent illegal workers being employed shall include but not be limited to the following: 1. Records of all workers shall be maintained by all contractors and subcontractors, and shall be submitted to the contractor's site agent on a daily basis. 2. Advise all persons entering the site by means of notices or posters that illegal workers will not be employed on the site, and that any illegal workers found on site will be reported to the authorities. 3. Advise all persons entering the site by means of notices or posters that anyone who fails to provide full and proper means of identification when requested to do so by a supervisor will not be allowed to remain on the site. F:..... V:..... T:.....	Item		
82	OVERTIME Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer F:..... V:..... T:.....	Item		
83	CO-OPERATION OF THE 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 contract value does not exceed the budget F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

	Brought Forward		R	
84	PRICES FOR VARIATIONS Where prices or quotations for variations are submitted by the contractor during the currency of the contract, it shall be clearly understood that these are for the purpose of consideration only and that there is not to be any assumption of their acceptance. F:..... V:..... T:.....	Item		
85	SCAFFOLDING Tenderer to allow for scaffolding in accordance with the scope, including the provision of scaffolding for sub contractors as necessary to complete the works F:..... V:..... T:.....	Item		
86	CHANGES TO THE SCOPE OF WORKS The client reserves the right to extend the scope of works by not more than 20 percent (%) of the tendered quantities without repricing. F:..... V:..... T:.....	Item		
87	SITE INSTRUCTIONS Contract instructions issued on site are to be recorded in triplicate in an instruction book which is to be maintained on site by the contractor. Copies to be sent to Principal Agent and Quantity Surveyor weekly. No verbal Contract Instructions will be considered for remuneration. F: V: T:	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

	Brought Forward		R	
88	<p>WARRANTIES FOR MATERIAL AND WORKMANSHIP</p> <p>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 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.</p> <p>F: V: T:</p>	Item		
89	<p>COOPERATION OF THE CONTRACTOR FOR COST MANAGEMENT</p> <p>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.</p> <p>F: V: T:</p>	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

	Brought Forward		R	
90	TESTING OF WINDOWS FOR WATERTIGHTNESS 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 equally approved means. F:..... V:..... T:.....	Item		
91	CONFIDENTIALITY The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works. No information regarding this project shall be published or disclosed without the prior written consent of the employer. F:..... V:..... T:.....	Item		
92	GROUND AND ACCESS TO WORKS On completion of operations, the contractor shall restore the ground surface, wherever it may have been disturbed, to its original condition by filling ruts with material similar to the material within the rut and levelling the ground and, where necessary, plant grass and shrubs as may be required. Reinstatement operations to be done at the Contractor's expense. F:..... V:..... T:.....	Item		
93	ESCALATION/ CONTRACT PRICE ADJUSTMENTS PROVISION This contract and the rates contained will be Fixed and not subject to Escalation / Contract Price Adjustment F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

	Brought Forward		R	
94	CONTRACT DRAWINGS Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent. F:..... V:..... T:.....	Item		
95	TRADE NAMES Wherever a trade name for any product has been described in the bills of quantities / lump sum document, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders. If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for. F:..... V:..... T:.....	Item		
96	IMPORTED MATERIALS AND EQUIPMENT Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment to be completed by tenderer) Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable) F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

	Brought Forward		R	
97	<p>ACCESS TO SITE LOCATIONS</p> <p>The site is located at 130 Intersite Avenue (Opposite Woodford Bid), Umgeni Business Park, Durban, 4001 (Co-ordinate: -29.812309, 30.999893) and the tenderer must allow in his pricing for access and other considerations specific to these environments</p> <p>F:..... V:..... T:.....</p>	Item		
98	<p>SECURITY / BACKGROUND CHECKS OF PERSONNEL</p> <p>The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, undertake criminal background checks</p> <p>In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works</p> <p>F:..... V:..... T:.....</p>	Item		
99	<p>SITE AND CONTACT RESTRICTIONS</p> <p>The contractor is required to keep his personnel and operations limited to the site boundary defined by the principal agent</p> <p>Under no circumstances is the contractor's workmen permitted to have any contact with any other person on the property except for the contact person/s identified by the principal agent for the purpose of liaising with the contractor's representative</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Bill No. 1 Preliminaries and General</p>			

	Brought Forward		R	
100	<p>HIV/AIDS AWARENESS</p> <p>It is required of the contractor to thoroughly study the HIV/AIDS Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements</p> <p>of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained</p> <p>The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (Section A)" or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p>	Item		
101	<p>AWARENESS CHAMPION</p> <p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p> <p>F:..... V:..... T:.....</p>	Item		
102	<p>AWARENESS WORKSHOPS</p> <p>Selection and appointment of a competent Service Provider by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Bill No. 1 Preliminaries and General</p>			

	Brought Forward		R	
103	POSTERS, BOOKLETS, VIDEOS, ETC. Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....	Item		
104	ACCESS TO CONDOMS Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....	Item		
105	MONITORING Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification F:..... V:..... T:.....	Item		
106	UTILISE LOCAL RESOURCES Utilise local resources F:..... V:..... T:.....	Item		
107	PROVIDE EXPERIENTIAL WORK OPPORTUNITIES TOWARDS A TECHNICAL QUALIFICATION FOR DESIGNATED PERSONS Provide experiential work opportunities towards a technical qualification for designated persons F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries and General			

Brought Forward		R	
108	<p>PROVIDE EXPERIENTIAL WORK OPPORTUNITIES AND TRAINING TOWARDS TRADE COMPETENCIES FOR DESIGNATED PERSONS</p> <p>Provide experiential work opportunities and training towards trade competencies for designated persons</p> <p>F:..... V:..... T:.....</p>	Item	
109	<p>COMMUNITY ENGAGEMENT OBLIGATION</p> <p>The contractor shall ensure labour and community harmony on the project site and in the surrounding community. The Contractor shall participate in all community engagement activities where appropriate to promote the successful early completion of the project.</p> <p>The CLO and the Contractors most senior site manager are required to participate in the regular scheduled PSC meetings. The terms of reference for the PSC will be established prior to electing community / stakeholder participants.</p> <p>F:..... V:..... T:.....</p>	Item	
Carried Forward		R	
Bill No. 1 Preliminaries and General			

	Brought Forward		R	
110	<p>OCCUPATIONAL HEALTH AND SAFETY</p> <p>The contractor shall comply with all the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and safety Act, 1993 (Act No 85 of 1993)</p> <p>It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the Bills of Quantities / lump sum document</p> <p>The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance.</p> <p>The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained</p> <p>Provide the amount for the cost of employing a full time Health & Safety Officer for the duration of the project</p> <p>F:..... V:..... T:.....</p>			
111	Profit	Item		
112	Attendance	Item		
113	<p>SAFETY EQUIPMENT</p> <p>Personal protective equipment, clothing, fencing, signage, and other safety equipment.</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Bill No. 1</p> <p>Preliminaries and General</p>			

	Brought Forward		R	
114	Profit	Item		
115	Attendance	Item		
116	COMMUNITY LIAISON OFFICER (CLO)			
	<p>The contractor shall allow for and pay any and all costs necessary for the engagement of the services of a Community Liaison Officer (CLO) for the full duration of this contract.</p> <p>A CLO will be identified by the local structures of the ward areas and appointed following fair and transparent interviewing process, to be conducted in the presence of local structures and the contractor representative, in order to assist the Contractor in the procurement of any local labour, etc. required for this project. The contractor is to liaise with the CLO and afford him any assistance needed in ensuring sound working relations with the local community.</p> <p>Key Responsibilities of the CLO are envisaged to include and not necessary be limited to:</p> <ol style="list-style-type: none"> 1. Assisting local leadership in conducting skills and resources audit which facilitates sourcing labour from within the ward or targeted areas for employment, as required by the contractor. 2. Assisting in sourcing labour only domestic sub-contractors and the procurement of materials from local resources, as required by the contractor. 3. Assisting the contractor by identifying areas of potential conflict and of threats to the project or to stakeholders in the project and recommend appropriate action to the contractor. 4. Assisting contractor and stakeholders in the project in the resolution of any conflict which may arise. 5. Establishing and ensuring that sufficient and open communication channels between the contractor and the work force are maintained. 6. Establish and ensuring that efficient and open communication channels between the contractor and the community are maintained. 7. Identifying and reporting to the contractor regarding issues where communication between stakeholder is 			
	Carried Forward		R	
	<p>Bill No. 1 Preliminaries and General</p>			

Brought Forward		R
necessary, recommend courses of action and facilitate such communications		
8. Assisting the Contractor and the work force in the establishment of grievance procedures and necessary recommendation to the contractor regarding the grievances and solution thereto.		
9. Attending to site meetings and project implementation meetings as required by the Contractor and prepare periodic reports as may be required by the Contractor from time to time.		
10. Attending to such other duties which are consistent with the functions of a CLO, as may be required by the Contractor from time to time.		
Tenderers are to price twice the rate of unskilled local labour rate against this item for any and all costs arising out of compliance with the foregoing and in the event of a Tenderer failing to price against this item or making inadequate financial provision against this item for compliance as aforesaid, then no claim for costs or additional cost incurred will be entertained by the Principal Agent.		
F:..... V:..... T:.....	Item	
117 SUB-CONTRACTING		
A tenderer to sub-contract a minimum 30% of the contract value to EME's and QSE's to have black ownership of 51% and above. The sub-contractor must reside within the municipal ward.		
F:..... V:..... T:.....	Item	
<u>SUMMARY OF CATEGORIES</u>		
Category : Fixed R.....		
Category : Value R.....		
Category : Time R.....		
Carried to Summary		R
Bill No. 1		
Preliminaries and General		

Item No	Quantity	Rate	Amount
<u>BILL NO. 2</u>			
<u>ALTERATIONS</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
View site			
<p>Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished.No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained.</p>			
Explosives			
No explosives whatsoever may be used for demolition purposes unless otherwise stated			
General			
<p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum disturbance to adjoining premises and their tenants.He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent.</p>			
<p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent.</p>			
Carried Forward		R	
<p>Bill No. 2 Alterations</p>			

Brought Forward				R
Prices for taking out of doors, windows, etc. shall include for removal of all beads, architraves, ironmongery, etc.				
Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc. and making good floor and wall finishes to match existing.				
With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork				
Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary.				
The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)				
Asbestos work may only be performed subject to prior approval of the Provincial Director, Occupational Health and Safety, department of Labour in writing.				
<u>REMOVAL OF EXISTING WORK</u>				
<u>Removal of existing services</u>				
1	Disconnect and remove electrical cables including light fittings, etc.	m2	1 077	
<u>Carefully disconnect existing electrical components and make safe all wiring:</u>				
2	Take out and remove light fittings	No	76	
3	Take out and remove plug points	No	16	
4	Take out and remove extractor fans	No	1	
<u>Carefully disconnect existing mechanical components and make safe all wiring:</u>				
5	Take out and remove wall mounted fans	No	5	
Carried Forward				R
Bill No. 2 Alterations				

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward			R
6	Take out and remove ceiling mounted fans	No	4
7	Take out and remove existing air-conditioning split unit	No	35
	<u>Demolish and remove existing dwelling formed of timber / steel frame and cladded with metal sheets, with and including breaking up surface beds, grubbing up foundations, etc. and making good ground level</u>		
8	Building size 4610 x 3970 x approximately 4000mm high	No	1
9	Building size 4900 x 3970 x approximately 4000mm high	No	1
	<u>Demolish and remove existing dwelling formed of timber / steel frame and cladded with asbestos, with and including breaking up surface beds, grubbing up foundations, etc. and making good ground level</u>		
10	Building size 2300 x 4600 x approximately 3500mm high	No	1
11	Building size 2630 x 6750 x approximately 3500mm high	No	1
12	Building size 3500 x 4750 x approximately 3500mm high	No	1
13	Carport structure complete including concrete hardstand approximate size 2410 x 3230 x 3000mm high	No	1
14	Carport structure complete including concrete hardstand approximate size 4150 x 5000 x 3000mm high	No	1
15	Carport structure complete including concrete hardstand approximate size 4920 x 9750 x 3000mm high	No	1
16	Carport structure complete including concrete hardstand approximate size 4920 x 16250 x 3000mm high	No	2
	<u>Demolish and remove existing dwelling formed of brick walls, tiled roof covering, with and including breaking up surface beds, grubbing up foundations, etc. and making good ground level</u>		
17	Building size 3700 x 11000 x 3500mm high	No	1
Carried Forward			R
Bill No. 2 Alterations			

Brought Forward				R
<u>Breaking down and removing brickwork etc</u>				
18	85mm Thick plinths	m2	62	
19	200mm Thick aprons	m2	45	
20	Half brick walls	m2	198	
21	One brick walls	m2	930	
<u>Cutting through</u>				
22	Carefully saw cut and break up 100mm thick surface bed to accommodate new 700mm wide concrete strip footings (Strip footings elsewhere measured)	m	18	
23	Carefully saw cut and break up 100mm thick surface bed to accommodate new 800mm wide concrete strip footings (Strip footings elsewhere measured)	m	131	
<u>Taking out and remove doors, windows, including thresholds, sills, etc.</u>				
24	Glazed aluminium window approximate size 1500 x 1200mm high	No	27	
25	Window blinds size 1500 x 2000mm long complete	No	28	
26	Semi solid timber door size 900 x 2100 high fitted onto steel door frames complete	No	54	
27	Semi solid timber door size 1600 x 2100 high fitted onto steel door frames complete	No	18	
28	Aluminium door size 900 x 2100mm high	No	1	
29	Aluminium door size 1600 x 2100mm high	No	3	
30	Aluminium and glass shower doors approximate size 1000 x 2100mm high	No	14	
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc.</u>				
31	Carefully take out and removed metal roof sheeting covering including sisalation, purlins, etc.	m2	729	
Carried Forward				R
Bill No. 2 Alterations				

**Alteration and Addition Works
Springfield Rolling Stock**

	Brought Forward			R	
32	Carefully take out and removed metal roof sheeting covering including sisalation, purlins, rafters, etc.	m2	275		
33	Carefully take out and removed asbestos roof sheeting covering including sisalation, purlins, rafters, etc.	m2	73		
34	Carefully take down and removed steel roof trusses (measured flat on plan) including modification works to existing steel roof trusses to remain, etc.	m2	720		
35	Take out and remove existing iso-board ceilings	m2	720		
36	Take out and remove existing suspended gypsum ceilings	m2	348		
37	Existing metal gutters including all ends, bends, etc.	m	91		
38	Existing uPVC gutters including all ends, bends, etc.	m	28		
39	Existing asbestos gutters including all ends, bends, etc. (by specialist)	m	12		
40	Existing metal downpipes including outlet, bends & shoe, etc.	m	51		
41	Existing uPVC downpipes including outlet, bends & shoe, etc.	m	20		
42	Existing asbestos downpipes including outlet, bends & shoe, etc. (by specialist)	m	10		
43	Existing asbestos fascia boards (by specialist)	m	40		
44	Existing asbestos barge boards (by specialist)	m	26		
45	Carefully take out existing metal fascia's and barge flashing, etc.	m	99		
	<u>Carefully take down and remove sundry joinery</u>				
46	Timber skirting from brickwork	m	556		
47	Kitchen floor unit approximate size 2.10 x 0.60 x 0.90m high	No	3		
48	Kitchen wall units approximate size 2.10 x 0.40 x 0.90m high	No	2		
	Carried Forward			R	
	Bill No. 2 Alterations				

**Alteration and Addition Works
Springfield Rolling Stock**

	Brought Forward			R	
49	Timber bench slats including angle brackets, etc. approximate size 0.60 x 2.00m long	m	4		
50	Timber bench slats including angle brackets, etc. approximate size 0.60 x 3.00m long	m	3		
51	Timber bench slats including angle brackets, etc. approximate size 0.60 x 5.00m long	m	4		
52	Timber bench slats including angle brackets, etc. approximate size 0.60 x 6.00m long	m	2		
53	Timber bench slats including angle brackets, etc. approximate size 0.60 x 7.00m long	m	1		
54	Double steel lockers approximate size 300 x 450 x 900mm high	No	88		
55	Double steel lockers approximate size 300 x 450 x 1800mm high	No	101		
56	Double timber lockers approximate size 300 x 450 x 1800mm high	No	23		
	<u>Taking up and removing vinyl floor coverings, carpeting, etc.</u>				
57	Vinyl sheet or tile floor covering including screed	m2	30		
58	Vinyl skirting 75mm high from walls	m	132		
	<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc</u>				
59	Tiles to floors	m2	1 101		
60	Tiles to walls	m2	406		
61	Tiled skirting average 100mm high to walls	m	392		
	Carried Forward			R	
	Bill No. 2 Alterations				

**Alteration and Addition Works
Springfield Rolling Stock**

	Brought Forward			R
	<u>Hacking up/off and removing granolithic, screeds, plaster, etc. from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc.</u>			
62	Plaster in patches	m2	52	
	<u>Taking out and removing piping, sanitary fittings, including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>			
63	Floor drains	No	12	
64	Shower cubicle complete with concrete base, etc.	No	22	
65	Vitreous china wash hand basin	No	39	
66	Vitreous china WC pan with cistern	No	21	
67	Vitreous china urinals	No	6	
68	Stainless steel urinals including concrete base	No	2	
69	Stainless steel double bowl sink	No	8	
70	Stainless steel double bowl wash trough	No	1	
71	Water drinking fountain	No	3	
72	10 Litres Hydroboil including short lengths of piping, etc.	No	3	
73	10 Litre geyser, including short lengths of piping, etc.	No	3	
74	300 Litre Boiler, including short lengths of piping, etc.	No	4	
75	1000 Litre Boiler, including short lengths of piping, etc.	No	2	
76	Stripping out 50mm uPVC pipes from existing walls including making good to walls	m	246	
77	Stripping out 110mm uPVC pipes from existing walls including making good to walls	m	221	
78	Stripping out 15mm copper pipes from existing walls including making good to walls	m	518	
	Carried Forward			R
	Bill No. 2 Alterations			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward			R
79	Stripping out 22mm copper pipes from existing walls including making good to walls	m	136
80	Stripping out 28mm copper pipes from existing walls including making good to walls	m	112
81	Stripping out 35mm copper pipes from existing walls including making good to walls	m	105
<u>Taking out/off and removing glass and mirrors</u>			
82	Mirror 600 x 900mm high from wall	No	26
83	Glass from steel frames including cleaning out rebates and preparing for new glass (elsewhere measured)	m2	62
<u>Taking out and removing ironmongery</u>			
84	Towel rail not exceeding 1000mm long from wall	No	9
85	Soap rack	No	22
86	Soap dispenser	No	63
87	Toilet paper holder	No	23
88	Paper towel holder	No	11
89	Sanitary bin	No	7
<u>PREPARATORY WORK TO EXISTING SURFACES</u>			
90	Hacking faces of existing face brickwork to receive plaster (new plaster elsewhere measured)	m2	247
<u>BUILDING UP OPENINGS</u>			
<u>Brickwork in NFP bricks in class II mortar in building up openings</u>			
91	Half brick walls	m2	16
92	One brick walls	m2	105
Carried Forward			R
Bill No. 2 Alterations			

Brought Forward			R
<u>Brickwork sundries</u>			
93	Cutting toothings and bonding new brickwork to existing	m2	87
<u>OPENINGS THROUGH EXISTING WALLS, ETC.</u>			
<u>Breaking out for and forming plain openings through precast concrete walls, including, making good cement plaster on both sides and into reveals and with 20MPa concrete thresholds with steel trowelled finish (making good paintwork elsewhere)</u>			
94	Opening 600 x 600mm high through 230mm thick brick walls	No	10
95	Opening 700 x 1450mm high through 230mm thick brick walls	No	5
96	Opening 900 x 1200mm high through 230mm thick brick walls	No	25
97	Opening 900 x 2100mm high through 230mm thick brick walls	No	8
98	Opening 1400 x 2100mm high through 230mm thick brick walls	No	1
99	Opening 1600 x 2100mm high through 230mm thick brick walls	No	4
100	Opening 1900 x 2100mm high through 230mm thick brick walls	No	1
101	Opening 2200 x 2100mm high through 230mm thick brick walls	No	1
102	Opening 2500 x 2100mm high through 230mm thick brick walls	No	1
103	Opening 2750 x 2100mm high through 230mm thick brick walls	No	1
104	Opening 3200 x 2100mm high through 230mm thick brick walls	No	1
<u>REPAIR WORK TO EXISTING</u>			
Carried Forward			R
Bill No. 2 Alterations			

Brought Forward			R
<u>Vertical expansion joints (internal/external walls)</u>			
<u>Poorly constructed and damaged expansion joints are to be repaired as follows:</u>			
1) Remove existing expansion joints.			
2) Remove all existing material/debris within the expansion joint gap and clean out the joint thoroughly.			
3) Install polystyrene backing board (approx. 100mm wide x 15mm thick) within the expansion joint gap.			
4) Apply 15 x 15mm poly sulphide sealant 'capping bead' (ABE product or similar approved) to the exposed face of the expansion joint			
5) The poly sulphide sealant is to be applied according to the manufacturer's specifications			
6) Paint wall to architects specifications			
105	Vertical joints in walls	m	90
<u>PREPARATORY WORK TO EXISTING SURFACES</u>			
<u>Preparatory work</u>			
106	Prepare existing floors to receive new epoxy paint (new epoxy elsewhere measured)	m2	1 409
107	Prepare existing skirting to receive new epoxy paint (new epoxy elsewhere measured)	m	775
108	Remove damaged face bricks and replace with new to match existing	m2	30
Carried to Summary			R
Bill No. 2 Alterations			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 3</u>			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Nature of ground</u>			
	Tenderer's must acquaint themselves with the nature of the material to be excavated and also refer to the attached geo-technical investigation report annexed to the Bills of Quantities.			
	<u>Carting away of excavated material</u>			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.			
	<u>SITE CLEARANCE, ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc. and trees not exceeding 200mm girth	m2	1 378	
	<u>Removal of trees, etc</u>			
	Carried Forward		R	
	Bill No. 3 Earthworks			

Brought Forward			R
<u>Cut down and remove trees, grub up roots and fill in holes:</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	7
3	Tree stump exceeding 500mm and not exceeding 1000mm girth.	No	3
<u>EXCAVATION OTHER THAN BULK</u>			
<u>Excavation in earth not exceeding 2m deep</u>			
4	Trenches	m3	264
5	Reduced levels	m3	517
<u>Restrictive excavation in earth not exceeding 2m deep</u>			
6	Trenches	m3	176
<u>Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 95% Mod. AASHTO density</u>			
7	Not exceeding 500mm deep for placing and removing formwork to foundations 300mm away from excavated face	m2	228
8	Exceeding 500mm and not exceeding 1500mm deep for placing and removing formwork to foundations 300mm away from excavated face	m2	456
<u>Extra over excavations in earth</u>			
9	Soft rock	m3	44
10	Hard rock	m3	22
<u>Extra over bulk excavation in earth for breaking up and removing</u>			
11	Reinforced concrete	m3	22
12	Brickworks	m3	11
Carried Forward			R
Bill No. 3 Earthworks			

Brought Forward				R
<u>Extra over all excavations for carting away</u>				
13	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	697	
<u>Risk of collapse of excavations</u>				
14	Sides of trench and hole excavations not exceeding 1,5m deep	m2	1 118	
<u>Keeping excavations free of water</u>				
15	Keeping excavations free of all water other than subterranean water		Item	
<u>FILLING ETC OTHER THAN BULK</u>				
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 95% Mod AASHTO density</u>				
16	Backfilling to trenches, holes, etc.	m3	84	
<u>Imported G7 material obtained from commercial sources supplied by the contractor, compacted to 97% Mod AASHTO density</u>				
17	Backfilling to trenches, holes, etc.	m3	44	
18	Under floors, steps, pavings, etc	m3	172	
<u>Imported G5 material obtained from commercial sources supplied by the contractor, stabilised with 4% cement content, compacted to 98% Mod AASHTO density</u>				
19	Backfilling to trenches, holes, etc.	m3	44	
20	Under floors, steps, pavings, etc	m3	172	
<u>Prescribed density tests on filling:</u>				
21	Modified AASHTO Density tests	No	86	
Carried Forward				R
Bill No. 3 Earthworks				

Brought Forward			R
<u>Compaction of surfaces</u>			
22	Compaction of ground surface under floors etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	1 148
23	Compaction of ground surface under strip footings, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% mod AASHTO density	m2	293
<u>SOIL POISONING</u>			
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>			
24	Under floors, lift pit, etc. including forming and poisoning shallow furrows against foundation walls etc. filling in furrows and ramming	m2	1 148
25	To bottoms and sides of trenches, etc.	m2	1 411
Carried to Summary			R
Bill No. 3 Earthworks			

Item No	Quantity	Rate	Amount
<u>BILL NO. 4</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
<p>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)</p>			
<u>Formwork</u>			
<p>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</p> <p>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.</p>			
Carried Forward		R	
Bill No. 4 Concrete, Formwork and Reinforcement			

Brought Forward			R
<p>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"</p> <p>Formwork to soffits of solid, etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described and propping not exceeding 3,5m high unless otherwise stated. Formwork to walls and columns is not exceeding 3,5m high above bearing level unless otherwise stated.</p> <p><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></p> <p><u>10MPa/19mm concrete</u></p>			
1	Surface blinding under footings and bases	m3	15
<p><u>REINFORCED CONCRETE</u></p> <p><u>25MPa/19mm concrete</u></p>			
2	<u>Strip footings</u>	m3	88
3	Surface Beds	m3	184
4	Ramps	m3	5
5	Aprons	m3	7
<p><u>30MPa/19mm concrete</u></p>			
6	Plinths	m3	12
7	Ring beams	m3	9
<p><u>Test Cubes</u></p>			
8	Making and testing set of three 150 x 150 x 150mm concrete strength test cube (Provisional)	No	25
<p><u>CONCRETE SUNDRIES</u></p>			
Carried Forward			R
<p>Bill No. 4 Concrete, Formwork and Reinforcement</p>			

Brought Forward				R
<u>Finishing top surfaces of concrete smooth with a wood float</u>				
9	Surface beds, slabs, etc.	m2	1 193	
10	Surface beds, slabs, etc. to falls	m2	35	
<u>Finishing top surfaces of concrete smooth with a steel float</u>				
11	Plinths, seating, etc.	m2	96	
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
<u>Rough formwork to sides</u>				
12	Strip Footings	m2	137	
13	Ring beams	m2	75	
14	Edges, risers, etc. not exceeding 300mm high or wide	m	199	
<u>Boxing out in smooth formwork to form</u>				
15	25 x 25mm Chamfer edges set horizontally	m	65	
<u>MOVEMENT JOINTS, ETC</u>				
<u>Two sheets of tempered hardboard (smooth sides together) to form slip joint between abutting horizontal concrete and brickwork surfaces</u>				
16	Not exceeding 300mm wide	m	110	
<u>Expansion joints with 15mm soft board between vertical concrete surfaces, including necessary formwork.</u>				
17	Not exceeding 300mm high through surface beds and slabs.	m	522	
<u>REINFORCEMENT</u>				
<u>Mild steel reinforcement to structural concrete work.</u>				
18	Various Diameter bars	t	9,46	
Carried Forward				R
Bill No. 4 Concrete, Formwork and Reinforcement				

Brought Forward			R
<u>High tensile steel reinforcement to structural concrete work</u>			
19	Various Diameter bars	t	2,36
<u>Fabric reinforcement</u>			
20	Type Ref. 193 fabric reinforcement in concrete surface beds etc.	m2	1 228
Carried to Summary			R
Bill No. 4 Concrete, Formwork and Reinforcement			

[illegible]

Item No		Quantity	Rate	Amount
	<u>BILL NO. 6</u>			
	<u>MASONRY</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>SAMPLES</u>			
	Samples of masonry building units to be provided before construction commences.			
	<u>SIZES IN DESCRIPTIONS</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>BAGGED AND SEALED WALLS</u>			
	User Note: The following preamble generally applies for works in hot and humid coastal areas.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating.			
	<u>FACE BRICKS</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour.			
	All facebrick work is to be protected from other finishing trades during the construction period.			
	All interior face brickwork is to receive two coats water based silicone sealant at completion including preparatory work as per manufacturers instructions.			
	Carried Forward		R	
	Bill No. 6 Masonry			

Brought Forward			R
<u>POINTING</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing etc.			
<u>BRICKWORK IN FOUNDATIONS</u>			
<u>(PROVISIONAL)</u>			
<u>Brickwork of 'Corobrik Maxibrick' NFX bricks or other equally approved (14 MPa nominal compressive strength) in class II mortar</u>			
1	Half brick walls	m2	86
2	One brick walls	m2	291
<u>BRICKWORK IN SUPERSTRUCTURE</u>			
<u>Brickwork of 'Corobrik Maxibrick' NFP bricks or other equally approved (7MPa nominal comprehensive strength) in class II mortar</u>			
3	Half brick walls	m2	207
4	Half brick linings to beamfilling	m2	38
5	One brick walls	m2	1 094
6	One brick walls in plinths	m2	17
<u>BRICKWORK SUNDRIES</u>			
<u>Bagging of 1:3 cement and sand mixture</u>			
7	On brick walls, columns, etc. including removing ridges, irregularities, etc	m2	577
<u>Joint forming material in movement joints</u>			
8	12mm Bitumen impregnated fibre board built in vertically through brick walls	m2	36
<u>2,5mm Brickwork reinforcement</u>			
9	75mm Wide reinforcement built in horizontally	m	1 149
Carried Forward			R
Bill No. 6 Masonry			

Brought Forward				R
10	150mm Wide reinforcement built in horizontally	m	5 429	
	<u>Pre-stressed fabricated concrete lintels including necessary temporary supports</u>			
11	110 x 75mm Lintels in lengths not exceeding 3m	m	278	
12	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	186	
	<u>Turning pieces to lintels etc.</u>			
13	Wide turning pieces not exceeding 300mm wide or high	m	213	
	<u>Galvanised hoop iron cramps, ties, etc.</u>			
14	30 x 1,6mm Cramp 500mm long with one end fixed to timber and other end built into brickwork	No	102	
	<u>FACE BRICKWORK</u>			
	<u>Corobrick - Firelight Satin or other equally approved face bricks pointed with flush horizontal and vertical joints</u>			
15	Extra over brickwork for face brickwork in foundations (Provisional)	m2	36	
16	Extra over brickwork in NFP bricks for face brickwork	m2	577	
17	Extra over brickwork in NFP bricks for face brickwork to plinths	m2	17	
18	Extra over brickwork for brick-on-edge header course bands one course high	m	213	
Carried to Summary				R
Bill No. 6 Masonry				

Item No	Quantity	Rate	Amount
<u>BILL NO. 7</u>			
<u>WATERPROOFING</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Waterproofing to SABS 021</u>			
Waterproofing shall be laid under a 10 year written guarantee for site workmanship and water tightness and to be laid to even falls to outlets etc.			
Descriptions of sheet or membrane waterproofing shall be deemed to include for additional labour to turn-ups and turn downs.			
<u>DAMP PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375 micron embossed polyethylene damp proof course (SANS 952-1985 type B)</u>			
1	On walls	m2 106	
2	Under cills	m2 79	
<u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u>			
3	Under surface beds, lift pits, etc	m2 1 148	
<u>Two coats brixal bitumen emulsion waterproof coating</u>			
4	On bagged brick walls	m2 577	
Carried Forward			R
Bill No. 7 Waterproofing			

Brought Forward			R
<u>WATERPROOFING TO ROOFS, BASEMENTS, ETC</u>			
<u>One Layer "Derbigum" or other equally approved SP4 waterproofing membrane sealed to solvent based bitumen primed surface by means of torch fusion with minimum 100mm side laps and minimum 150mm end laps.</u>			
5	On roof slabs, with and including turn-ups and turn-downs not exceeding 300mm girth	m2	35
6	Extra over for sealing around 110mm diameter full-bores.	No	1
<u>WATERPROOFING TO SHOWERS</u>			
<u>RFK Sika Chemflex' waterproofing slurry, with and including 'Sika' membrane apply as per manufacturer's strict instructions:</u>			
7	On shower floors	m2	84
8	On shower walls	m2	499
<u>PROTECTIVE ROOFING PAINT</u>			
<u>Two coats bituminous aluminium paint</u>			
9	On waterproofing to roofs	m2	35
<u>SEALING STRIPS, JOINT SEALANTS, ETC</u>			
<u>Sika or other approved two-part grey poly sulphide sealing compound including backing cord, bond breaker, primer, etc.</u>			
10	15 x 15mm In expansion joints in floors including raking out expansion joint filler as necessary	m	522
<u>Sika or other approved polyurethane sealing compound including backing cord, bond breaker, primer, etc.</u>			
11	15 x 15mm In vertical expansion joints including raking out expansion joint filler as necessary	m	310
Carried to Summary			R
Bill No. 7 Waterproofing			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 8</u>			
	<u>ROOF COVERINGS</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>SHEETING</u>			
	Safintra or other similar approved 0,50mm thick SAFLOK 700 Colorplus® AZ150 interlocking roof sheeting fixed to timber internal purlins at 2000mm, and ridge/eaves purlins at 1700mm centres using SAFLOK 700 clips which must be screw fixed to timber purlins with Fixtite® or Safintra approved wafer head self-tapping screws. The sheeting will be a double interlocking concealed fix SAFLOK 700 profile as manufactured by Safintra Roofing, roll formed in continuous lengths from certified G550 steel or aluminium 3004 H14. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41mm. Two stiffening ribs are incorporated in each pan.			
	<u>MATERIAL AND FINISH FOR SAFLOK ROOF SHEETING</u>			
	ZincAL® AZ150 coated steel G550 with a ColorPLUS® colour coated finish to one side, colour (sample of colour to be approved on site) with a Cool Grey backing coat.			
	<u>FIXING SAFLOK</u>			
	The Saflok sheets shall be fixed to every purlin by means of patented SAFLOK 700 clips having spurs which will securely hold the sheets in position and lock-			
	Carried Forward			
	Bill No. 8 Roof Covering		R	

<p style="text-align: right;">Brought Forward</p> <p>in the sidelap and both centre ribs. The SAFLOK 700 clips shall be manufactured from Galvanized steel and shall be fixed with the appropriate self-drilling/tapping screws to timber or steel purlins (selection from installation manual) OR with ZAP no. 10x45mm Waferhead screws type 17 to timber purlins.</p> <p><u>SAFLOK FLASHINGS</u></p> <p>Flashings specifications shall be to the Safintra standards and fixed to the sheeting with S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Transverse flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from Global Roofing Solutions.</p> <p><u>SAFETY</u></p> <p>The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity.</p> <p><u>INSTALLATION</u></p> <p>Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, should be replaced. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces.</p> <p><u>HANDLING AND STORAGE</u></p> <p>The contractor shall ensure that all materials used on site for roofing/cladding, be transported, handled and</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 8 Roof Covering</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: right;">Brought Forward</p> <p>stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction.</p> <p><u>INSPECTION PRIOR TO INSTALLATION</u></p> <p>Before commencing installation, the contractor shall verify that the following items have been checked and accepted:</p> <ol style="list-style-type: none"> a. The entire structure or the portion thereof to be sheeted has been correctly aligned, levelled and grouted. b. Purlins and girths are at the correct spacing and are within the specified tolerances. c. The corners of the roof are square and the wall framework is perpendicular or as specified. d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework. e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square. f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or, so dealt with that direct contact with the sheeting is avoided. g. The contact faces between the purlins or the girths and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding. <p><u>PROTRUSION THROUGH SHEETED SURFACES</u></p> <p>Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the</p> <p style="text-align: right;">Carried Forward</p> <p>Bill No. 8 Roof Covering</p>	<p style="text-align: center;">R</p>
	R

Brought Forward			R
<p>sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations.</p> <p><u>GUARANTEE</u></p> <p>The manufacturer shall comply with ISO 9001:2008 Quality Management System. SAFLOK 700 sheeting shall be laid in strict accordance with the manufacturer's specifications by a approved Safintra contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions.</p> <p>CLEANING OF ROOF, ETC.</p> <p>All debris, swarf, etc arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners, sealants, mandrels from pop rivets, off-cuts of sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc.</p> <p><u>PROFILED METAL SHEETING AND ACCESSORIES</u></p> <p><u>0.50mm "Saflok 700 Colourplus" or other equally approved aluminium zinc (AZ 150) ribbed double interlocking roof sheeting in single lengths and accessories with "Colourplus" colour coated finish on one side, fixed to steel purlins in strict accordance with the manufacturers recommendations</u></p>			
1	Roof covering with pitches not exceeding 25 degrees	m2	1 878
2	Head wall flashing, 560mm girth	m	129
Carried Forward			R
<p>Bill No. 8 Roof Covering</p>			

Brought Forward			R
3	Side wall flashing, 560mm girth	m	113
4	Barge flashing, 560mm girth	m	152
5	Fascia board flashing, 560mm girth	m	129
<u>ROOF AND WALL INSULATION</u>			
<u>'Safintra Safftherm' or other equally approved:</u>			
6	100mm Thick polyester fibre blanket insulation layer installed all in accordance to manufacturer's specifications	m2	1 878
Carried to Summary			R
Bill No. 8 Roof Covering			

Item No	Quantity	Rate	Amount
<u>BILL NO. 9</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Fixing</u>			
Items described as 'nailed' shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as 'bolted', the bolts have been given elsewhere.			
Sample of all items to be provided for Architect's approval. Approved samples to remain in the sample room for the duration of the contract.			
All finishes to comply with SABS standards.			
<u>DOORS</u>			
<u>Semi-solid flush panel door with veneer and hardwood edge strips all round, hung to timber frames (timber frames elsewhere measured)</u>			
1	44mm Single door 813 x 2032mm high	No	54
<u>Solid flush panel door with veneer and hardwood edge strips all round, hung to timber frames (timber frames elsewhere measured)</u>			
2	44mm Single door 813 x 2032mm high	No	41
3	44mm Double door 1613 x 2032mm high	No	34
Carried Forward			R
Bill No. 9 Carpentry and Joinery			

Brought Forward			R
4	Extra over door 813 x 2032mm high overall for cutting and forming opening approximately 400 x 400mm high.	No	19
<u>FRAMED FRAMES ETC</u>			
<u>Wrought meranti</u>			
5	55 x 80mm Rebated frames, plugged	m	224
<u>TIMBER BENCHES</u>			
<u>The following in selected wrot meranti timber benches fixed to steel angle supports (Steel angle supports elsewhere measured)</u>			
6	100 x 30mm thick wrought balau bolted with stainless steel countersunk fixings onto brick walls (brick walls elsewhere measured)	m	15
<u>JOINERY, CUPBOARDS & WORKTOPS</u>			
<u>Reception Area</u>			
7	Reception unit made of work top formed of 40mm formica work top with bull nose, white in colour, Overall size of work top is 4200mm long x 600mm wide. Work top with one end fixed on to wall bracket as per supplier recommendation. The other end and front of work top fixed on to white melamine uprise board. Front and side board formed of white melamine carcass, 1200mm high, edge strips to comply to SABS 540, to be mounted on to wall and floor as per supplier recommendation. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.	No	1
8	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 3600mm long x 600mm wide x 900mm high. Unit comprises base, four (4) doors and two (2) drawer. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.	No	1
Carried Forward			R
Bill No. 9 Carpentry and Joinery			

Brought Forward			R
<u>Offices</u>			
9	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises two (2) door and two (2) open shelf. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.	No	23
10	Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 900mm high. Unit comprises base, one (1) drawer. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.	No	23
<u>Security Room</u>			
11	Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises two (2) door and two (2) open shelf. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.	No	1
Carried Forward			R
Bill No. 9 Carpentry and Joinery			

	Brought Forward			R
12	<p>Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 900mm high. Unit comprises base, one (1) drawer. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.</p> <p>Staff Kitchen</p>	No	1	
13	<p>Wall shelf unit made of white melamine carcass with vancouver maple melamine for cupboard doors, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Wall unit to be mounted on wall as per supplier recommendation. Overall size of the unit 1800mm long x 600mm wide x 800mm high. Unit comprises two (2) door and two (2) open shelf. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.</p>	No	5	
14	<p>Floor unit made of work top formed of 40mm formica work top with bull nose, white in colour, and white melamine carcass with vancouver maple melamine for cupboard doors & drawer, edge strips to comply to SABS 540, complete with concealed hinges on all cupboard doors and 106 x 30mm pull handle chrome finish (code: TS2129MC), handle by "Roco" or similar approved. Unit to be fixed to floor and wall as per supplier recommendation. Overall size of the unit 2215mm long x 600mm wide x 900mm high. Unit comprises cut out for single / double bow sink drop in (sink supplied by others), base, three (3) doors and one (1) drawer. Tenderer's are required to refer to architect drawings for full details and specification prior to pricing.</p>	No	5	
Carried to Summary				R
Bill No. 9 Carpentry and Joinery				

Item No	Quantity	Rate	Amount
<u>BILL NO. 10</u>			
<u>CEILINGS PARTITIONS AND ACCESS FLOORING</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>SUSPENDED CEILINGS</u>			
<u>Proprietary suspended ceilings</u>			
User Note - The following preamble to be included in the Bills of Quantities after confirmation of the basic design of the ceilings, lighting, air conditioning, etc.			
Hangers, suspension grids, lay-in panels, etc. are to be in accordance with the manufacturers recommendations.			
Electrical light fittings, diffusers, panels etc. are generally lay-in units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)			
<u>'Owa Coustic' 'Future 60'; 12.5mm Vinyl faced ceiling panels, face covered with white embossed vinyl, 1200 x 600mm tiles laid on fire rated 'Clip System S3' exposed demountable suspension system including galvanised main tees, cross tees, etc.</u>			
1	Ceilings suspended not exceeding 1m below structural steel trusses	m2	2 717
2	Extra over for 600 x 600mm Opening in ceiling for diffuser	No	210
Carried Forward			R
Bill No. 10 Ceilings, Partitions and Access Flooring			

Alteration and Addition Works

Springfield Rolling Stock

Brought Forward			R
3	Extra over for 40mm Diameter opening in ceiling panels for light fittings, fire detection, etc.	No	314
4	Extra over for 100mm diameter opening in ceiling panels for light fittings	No	157
<u>Cornices to suspended ceilings:</u>			
5	47 x 35mm 'SM25' recessed shadowline cornice plugged (code LSM 25)	m	1 470
Carried to Summary			R

Bill No. 10

Ceilings, Partitions and Access Flooring

Item No		Quantity	Rate	Amount
	<u>BILL NO. 11</u>			
	<u>IRONMONGERY</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Proprietary items</u>			
	<u>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items. Prices are to be based on the specific products/articles specified. If tenderer's wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc. clarifying the features of the products/articles offered on request returnable samples are to be provided to the principal agent for consideration.</u>			
	<u>Finishes to ironmongery</u>			
	<u>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AN Anodised natural AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded.</u>			
	<u>HINGES, BOLTS, ETC.</u>			
	<u>Manufactured by 'Assa Abloy' or other equally approved</u>			
1	"Assa Abloy" or other equally approved SS 2BB butt hinge EN1935GRD13 (Code:JH-BB-STD-2-SS)	Pairs	44	
	Carried Forward		R	
	Bill No. 11 Ironmongery			

Brought Forward			R
<u>LOCKSETS, ETC</u>			
<u>Manufactured by "Assa Abloy" or other equally approved</u>			
2	"Assa Abloy" or other equally approved knob cylinder profile MKD SC (Code: 2X19SCMKD)	No	31
3	"Assa Abloy" or other equally approved Single cylinder profile MKD SC (Code: 2X20SCMKD)	No	9
4	"Assa Abloy" or other equally approved Double cylinder profile MKD SC (Code: 2X18SCMKD)	No	3
5	"Assa Abloy" or other equally approved Escutcheon on rose bathroom (Code: SS5004-73SS)	Pairs	47
6	"Assa Abloy" or other equally approved Union E/P cylinder upright lock (Code: L-2215-78-SS/SL)	No	34
7	"Assa Abloy" or other equally approved E/Profile cylinder dead lock with adjustable roller latch stainless steel (Code: L-2115-78SS/R)	No	9
8	"Assa Abloy" or other equally approved Bathroom deadbolt - stainless steel (Code:SS2016SS)	No	47
9	"Assa Abloy" or other equally approved Paraplegic facility Indicator bolt AS (Code: 37651AS)	Pairs	3
<u>Manufactured by "Dormakaba" or other equally approved</u>			
10	"Dormakaba" or other equally approved 45mm five pin Euro-profile Single Cylinder Master Keyed (Code:DSC104501MK)	No	29
11	"Dormakaba" or other equally approved Cylinder Deadlock Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. (Code: D037D SS)	No	29
12	"Dormakaba" or other equally approved adjustable roller bolt (Code: DBC-SS-022)	No	29
<u>HANDLES</u>			
Carried Forward			R
Bill No. 11 Ironmongery			

Brought Forward			R
<u>Manufactured by "Assa Abloy" or other equally approved</u>			
13	"Assa Abloy" or other equally approved Seagull SS lever handle on backplate - E/Profile cylinder (Code:SS6SG01-44-05SS)	No	68
14	"Assa Abloy" or other equally approved 22mm Diameter tubular SS dove pull handle on 152 x 304mm back plate - (Code:SS5D152X304-06)	No	16
15	"Assa Abloy" or other equally approved SS BT handle with flange fixing - 300mm centres 22mm diameter (Code:PHD-CF-300-22SS)	No	6
16	"Assa Abloy" or other equally approved SS BT pull handle - 150mm centres 22mm diameter (Code: PHD-BT-150-22SS)	No	47
<u>Manufactured by "Dormakaba" or other equally approved</u>			
17	"Dormakaba" or other equally DPH301C Pull Handle BT fixed on a 170x170x1.2mm thick Grade 430 stainless plate with cylinder cutout left.Stainless steel plate to have 4 countersunk holes for screw fixing. (Code: DHP-430-CL-SF 170x170)	No	116
<u>PUSH PLATES AND KICK PLATES</u>			
<u>Manufactured by "Assa Abloy" or other equally approved</u>			
18	"Assa Abloy" or other equally approved 250 x 800mm Works kick plate (Code: SS5089-250W)	No	19
19	"Assa Abloy" or other equally approved 152 x 228mm Works push plate (Code: SS5023-228W)	No	54
20	"Assa Abloy" or other equally approved 152 x 304mm Stainless steel push plate LH - Euro profile (Code: SS5023L-05-304W)	No	9
<u>LETTERS, NAMEPLATES, ETC</u>			
Carried Forward			R
Bill No. 11 Ironmongery			

Brought Forward			R
<u>Manufactured by "Assa Abloy" or other equally approved</u>			
21	"Assa Abloy" or other equally approved 150 x 150mm Male sign (Code: SS5066-06SSE10)	No	6
22	"Assa Abloy" or other equally approved 150 x 150mm Female sign (Code: SS5066-06SSE11)	No	3
23	"Assa Abloy" or other equally approved 150 x 150mm Paraplegic sign (Code: SS5066-06SSE14)	No	3
24	"Assa Abloy" or other equally approved 150 x 150mm Male & Female sign (Code: SS5066-06SSE12)	No	3
25	"Assa Abloy" or other equally approved 150 x 150mm Tea/kitchen sign (Code: SS5066-06SSE02)	No	11
26	"Assa Abloy" or other equally approved 150 x 150mm Electrical sign	No	10
<u>STATUTORY SIGNAGE</u>			
<u>Statutory signage to be SABS approved and photo luminescent, external signage to be UV rated</u>			
<u>Red and white single sided signage screwed fixed on to walls as per manufacturer's details</u>			
27	190 x 190mm Arrow sign	No	195
28	190 x 190mm Fire extinguisher sign	No	80
29	190 x 190mm Fire hose reel sign	No	30
30	190 x 190mm Fire hydrant sign	No	10
<u>Green and white single sided signage screwed fixed on to walls as per manufacturer's details</u>			
31	190 x 190mm Arrow sign	No	66
32	190 x 190mm Running man sign	No	15
33	300 x 200mm Fire exit keep clear sign	No	18
<u>DOOR CLOSURE</u>			
Carried Forward			R
Bill No. 11 Ironmongery			

Brought Forward			R
<u>Manufactured by "Assa Abloy" or other equally approved</u>			
34	"Assa Abloy" or other equally approved Cam motion closer EN3/4 SIL (Code: DC175)	No 31	
35	"Assa Abloy" or other equally approved R&P closure EN 2-4 SIL (Code: DC200)	No 16	
36	"Assa Abloy" or other equally approved R&P closure EN 3-6 DA SIL (Code: DC300DA)	No 3	
<u>BATHROOM FITTINGS</u>			
<u>Manufactured by 'Franke' or other equally approved</u>			
37	Franke Stratos STRX 618E or other equally approved 1.5mm thick Grade 304 18/10 stainless steel recessed soap dispensers (code:359705), size 128 x 147 x 632mm deep with a replaceable and refillable 1 litre container, cylinder lock with standard Franke key, plugged and screwed to wall with and including stainless steel screws.	No 61	
38	Franke Stratos STRX 672E or other equally approved 1.5mm thick Grade 304 18/10 stainless steel recessed toilet roll holders (Code 359721), size 304 x 156 x 140.7mm deep for 2 rolls maximum 108mm diameter with spindle system, cylinder lock with standard Franke key, plugged and screwed to wall with and including stainless steel screws.	No 47	
39	Franke Stratos STRX 605 or other equally approved 1.5mm thick Grade 304 18/10 stainless steel waste disposal bins (Code: 359730), size 300 x 270 x 520mm high, capacity of 34 litres, cylinder lock with standard Franke key, plugged and screwed to wall with and including stainless steel screws.	No 34	
40	Franke Stratos STRX 611E or other equally approved 1.5mm thick Grade 304 18/10 stainless steel recessed sanitary towel disposal bins (Code: 359741), size 304 x 205 x 134mm deep with capacity of 6 litres, plugged and screwed to wall with and including stainless steel screws.	No 13	
Carried Forward			R
Bill No. 11 Ironmongery			

	Brought Forward			R
41	Franke HF2400HD or other equally approved 1.5mm thick Grade 304 18/10 stainless steel automatic hands free hand dryer (Code: 359961), size 284 x 202 x 248mm deep with 2 No. Vandal proof lock screws and key wrench, plugged and screwed to wall with and including stainless steel screws.	No	13	
	<u>"Bathroom Butler Series 4600" or other equally approved:</u>			
42	"Bathroom Butler Series 4600" or other equally approved single rail in polished grade 304 stainless steel finish (code: 4678POLS), overall size 1125 x 105 x 50mm, plugged and screwed to wall with stainless steel screws.	No	84	
43	"Bathroom Butler Series 4600" or other equally approved soap rack in polished grade 304 stainless steel finish (Code: 4630POLS), overall size 145 x 130 x 50mm, plugged and screwed to the wall with stainless steel screws.	No	84	
44	"Bathroom Butler Series 4600" or other equally approved paper holder type II in polished grade 304 stainless steel finish (Code: 4602POLS), overall size 180 x 97 x 100mm, plugged and screwed to wall with stainless steel screws.	No	30	
	<u>PARAPLEGIC FITTINGS</u>			
	<u>Paraplegic Fittings - Supplied by 'Chairman Industries' or other equally approved</u>			
45	32mm Serrated stainless steel rear grab rail fixed vertically next to seat (Code SR2)	No	3	
46	32mm Serrated stainless steel vertical wall grab rail at shower (Code SR1)	No	3	
47	32mm Serrated 90 degree angled stainless steel dog leg side grab rail angled to suite (Code DL3)	No	3	
	<u>BLINDS</u>			
	<u>"Windowvert" or other equally approved</u>			
48	Vertical slatted blinds 100mm wide to fit opening 900 x 1300mm high opening	No	19	
	Carried Forward			R
	Bill No. 11 Ironmongery			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward			R
49	Vertical slatted blinds 100mm wide to fit opening 1400 x 1800mm high opening	No	1
50	Vertical slatted blinds 100mm wide to fit opening 2200 x 600mm high opening	No	1
51	Vertical slatted blinds 100mm wide to fit opening 2700 x 500mm high opening	No	2
52	Vertical slatted blinds 100mm wide to fit opening 3500 x 600mm high opening	No	1
53	Vertical slatted blinds 100mm wide to fit opening 3800 x 500mm high opening	No	2
54	Vertical slatted blinds 100mm wide to fit opening 3900 x 1800mm high opening	No	1
55	Vertical slatted blinds 100mm wide to fit opening 5800 x 600mm high opening	No	3
56	Vertical slatted blinds 100mm wide to fit opening 6500 x 1900mm high opening	No	1
57	Vertical slatted blinds 100mm wide to fit opening 7000 x 1800mm high opening	No	3
58	Vertical slatted blinds 100mm wide to fit opening 7100 x 500mm high opening	No	4
<u>SUNDRIES</u>			
<u>Manufactured by 'Assa Abloy' or other equally approved</u>			
59	"Assa Abloy" or other equally approved Floor mounted door stop (Code: 87001SS)	No	105
60	"Assa Abloy" or other equally approved Hat and coat hook with rubber buffer (Code: SS8025SS)	No	78
<u>Manufactured by "Dormakaba" or other equally approved</u>			
61	"Dormakaba" or other equally approved Rebate conversion kit for Euro profile locks D036S, D037D. (Code: D038R NP)	No	29
Carried Forward			R
Bill No. 11 Ironmongery			

Alteration and Addition Works

Springfield Rolling Stock

[illegible]

Item No	Quantity	Rate	Amount
<u>BILL NO. 12</u>			
<u>STRUCTURAL STEEL</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item</p>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessarily full and complete and reference must be made to the "Standard Preambles To All Trades", "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirements of each scheduled item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include pending, threading, nuts and washers and embedding in concrete.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p>Structural steelwork shall comply with the requirements of SABS 1200H and the relevant project specifications.</p>			
Carried Forward		R	
<p>Bill No. 12 Structural Steel</p>			

<p style="text-align: center;">Brought Forward</p> <p><u>Corrosion Protection</u></p> <p>All steelwork</p> <p>a) Abrasive blast to Sa 2.5</p> <p>b) Galvanize to SABS 763 (Heavy Duty)</p> <p>c) Clean with Galvanized iron cleaner, treat galvanizing in such a way so that paint may be applied over it</p> <p>d) Apply 1 coat galvanizing primer - Inter guard 269 or equally</p> <p>e) Apply 2No. Coats re-coatable polyurethane - Interthane 900 or equal approved . Colour to Architect's specification.</p> <p>All hot rolled steelwork shall be grade 350W, all hollow tube steelwork shall be grade 300W and all cold formed steelwork shall be SANS 10162 Part 1 with a minimum yield stress of 200Mpa and a minimum tensile stress of 365Mpa unless noted otherwise.</p> <p>All fixing bolts for structural steelwork shall be M20 grade 8.8 unless otherwise noted, and is deemed included. Only chemical anchor bolts are to be measured as a measurable item.</p> <p>All welds shall be 6mm continuous fillet welds unless noted otherwise.</p> <p>When steelwork connects to structures, the steelwork contractor shall check all site dimensions and levels before fabrication and erection.</p> <p>No flame cutting or site welding shall be carried out without the written approval of the Engineer's.</p> <p>Shop drawings shall be submitted in duplicate to the Engineer's for approval before commencing any fabrication.</p> <p><u>Traceability of steel</u></p> <p>All steel to be marked with manufacturer's test certificate number to ensure full traceability and to facilitate re-use of the steel members.</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Bill No. 12 Structural Steel</p>	<p style="text-align: center;">R</p>

Brought Forward			R
<u>Marking steelwork</u>			
Completed components shall be marked with a durable and distinguishing erection mark, section size, steel grade and manufacturer's test certificate number in such a way as not to damage the component. Marking shall be in a discrete location. Hard stamping may be used unless noted otherwise.			
<u>Testing of welds</u>			
10% of all fillet welds and 100% of butt welds to be subjected to non destructive testing.			
Fabricate, supply, deliver and erect including shop and site painting as described.			
<u>Note: All Structural steel work to trusses, girders, columns, etc. to be priced inclusive of Grade 8.8 galvanised bolts or other bolts as necessary</u>			
<u>HOT DIPPED GALVANISED STEEL MEMBERS</u>			
<u>Welded steel members in single lengths with connection plates, bolted to concrete</u>			
1	Various structural steel members	t	54,46
<u>SUNDRY STEELWORK</u>			
<u>Sundry Steelwork</u>			
2	Cleats, plates, gussets, connectors, etc.	t	2,72
Carried to Summary			R
Bill No. 12 Structural Steel			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 13</u>			
	<u>METALWORK</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>GALVANISED STEEL GATES, SCREENS, ETC.</u>			
	<u>Hot dipped galvanised steel gates</u>			
1	Single gate size 900 x 2100mm high with 30 x 30 x 4mm mild steel frame with beading to secure mesh as approved by architect. All steel to be painted with Hammer Rites as per finishing schedule. Tenderer's are required to refer to Architect's drawing for full details and specification prior to pricing.	No	29	
2	Single gate size 1700 x 2100mm high with 30 x 30 x 4mm mild steel frame with beading to secure mesh as approved by architect. All steel to be painted with Hammer Rites as per finishing schedule. Tenderer's are required to refer to Architect's drawing for full details and specification prior to pricing.	No	27	
	<u>GALVANISED STEEL BALUSTRADES, ETC.</u>			
	<u>Standard ball type steel balustrades</u>			
3	Standard ball type handrail and post fixed on 100 x 100 x 8mm thick base plate with 4 No. M10 chemical anchors fixed to concrete floors. Fischer M10 (8.8) galvanised H.D. anchor studs (with embedment length 220mm) with fischer FIS-V-360 chemical mortar or similar approved chemical anchors with 'ETA' (european technical approval)	m	1 933	
4	Extra over for 90 degree bend	No	28	
	<u>HOT DIPPED GALVANISED STEEL BURGLAR BARS</u>			
	Carried Forward		R	
	Bill No. 13 Metalwork			

Brought Forward			R
	<p><u>50 x 50mm Hot dipped galvanised vertical bars with rounded ends and polished edges and fixed to wall with 10mm diameter counter sunk expansion bolts through 19mm diameter steel pipe spacers with bolt heads securely epoxy fixed to frame. 19mm Diameter hot dipped galvanised steel pipes equally spaced and welded to vertical flat bars.</u></p>		
5	Burglar bar size 600 x 600mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	5
6	Burglar bar size 600 x 2300mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	8
7	Burglar bar size 700 x 1600mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	4
8	Burglar bar size 900 x 900mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	7
9	Burglar bar size 900 x 1300mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	19
10	Burglar bar size 1400 x 1800mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	1
11	Burglar bar size 2200 x 600mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	1
Carried Forward			R
Bill No. 13 Metalwork			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward				R
12	Burglar bar size 2700 x 500mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	2	
13	Burglar bar size 3500 x 600mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	1	
14	Burglar bar size 3800 x 500mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	2	
15	Burglar bar size 3900 x 1800mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	1	
16	Burglar bar size 7100 x 500mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	4	
17	Burglar bar size 5800 x 600mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	3	
18	Burglar bar size 6500 x 1900mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	1	
19	Burglar bar size 7000 x 1800mm high. Tenderer's are referred to Architects drawings annexed to these Bills of Quantities.	No	3	
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>				
Carried Forward				R
Bill No. 13 Metalwork				

Brought Forward			R
	<u>1,2mm Double rebated frames suitable for half brick wall fitted with three hinges</u>		
20	Frame for door 813 x 2032mm high.	No	5
	<u>1,2mm Double rebated frames suitable for one brick walls fitted with three hinges</u>		
21	Frame for door 813 x 2032mm high.	No	7
22	Frame for door 1613 x 2032mm high.	No	20
	<u>ALUMINIUM WINDOWS, DOORS, SHOPFRONTS, ETC</u>		
	<u>Aluminium window complete with subframes, ironmongery, glass, sealing, etc., and fixing to brickwork or concrete or steel</u>		
	<u>Glazing thickness in accordance with table 1 of SANS 10400 Part 'N'</u>		
23	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 600 x 600mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	5
24	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 600 x 2300mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	8
25	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 700 x 1600mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	4
Carried Forward			R
Bill No. 13 Metalwork			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward				R
26	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 900 x 900mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	7	
27	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 900 x 1300mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	19	
28	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 1400 x 1800mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	1	
29	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 2200 x 600mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	1	
30	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 2700 x 500mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	2	
31	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 3500 x 600mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	1	
Carried Forward				R
Bill No. 13 Metalwork				

Brought Forward				R
32	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 3800 x 500mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	2	
33	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 3900 x 1800mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	1	
34	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 7100 x 500mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	4	
35	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 5800 x 600mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	3	
36	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 6500 x 1900mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	1	
37	Purpose made 'natural anodised' powder coated aluminium window including opening panels, fixed panels, all glazing with 6.38mm Low-E glazing, overall size 7000 x 1800mm high. Tenderer's are referred to Architect's drawings annexed to these Bills of Quantities.	No	3	
<u>ANODISED ALUMINIUM LOUVRE UNITS</u>				
Carried Forward				R
Bill No. 13 Metalwork				

Brought Forward			R
	<u>'Trox' or other equally approved natural anodised louvre units screwed into wooden door</u>		
38	Type AGS-T size 400mm wide x 400mm high	No	19
	<u>ANODISED ALUMINIUM ROLLER SHUTTER DOOR</u>		
	<u>"Roll-Up Serranda" or other equally approved alu-solid powder coated aluminium slated roller shutter door as per manufacturer specification and design. Roller shutter door fixed to brickworks, reinforced concrete, precast concrete or structural steel.</u>		
39	Manually operated roller shutter door to suite overall opening 3800 x 3000mm high. Architect's drawings annexed to these Bills of Quantities.	No	2
	<u>SHOWER DOORS</u>		
	<u>"CTM" or other equally approved CrystalTech Inline White Adjustable Pivot Shower Door - CTE805 - 1000 to 1200 x 1850mm</u>		
40	Adjustable pivot door size - 1000 to 1200 x 1850mm	No	84
	<u>COVERED WALKWAYS</u>		
	<u>Awnmaster awnings:</u>		
41	Chromodeck awning, size 5000 x 12000mm wide fixed on galvanised steel supports and posts, with and including fascia, aluminium gutter and downpipes installed complete.	No	1
42	Chromodeck awning, size 5000 x 50000mm wide fixed on galvanised steel supports and posts, with and including fascia, aluminium gutter and downpipes installed complete.	No	1
	<u>STEEL LOCKERS</u>		
	<u>Steel double compartment stacked lockers (Code: LO10), epoxy powder coated with flush fitting doors, for padlock. To comply with BS EN ISO 9001-2000 requirements. Colour, admiral grey.</u>		
43	300 x 450 x 1800mm high steel lockers	No	185
Carried Forward			R
Bill No. 13 Metalwork			

Brought Forward		R	
<u>STEEL SHELVES</u>			
<u>Single rivet high density shelving decked with steel decking, epoxy powder coated, all in accordance to Prasa specification (Code: P04)</u>			
44	1200 x 400 x 1875mm high steel sheaving with six (6) decking	No	6
Carried to Summary		R	
Bill No. 13 Metalwork			

Item No	Quantity	Rate	Amount
<u>BILL NO. 14</u>			
<u>PLASTERING</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Method</u>			
The method to be used shall be either the monolithic method or the bonded method.			
<u>Laying</u>			
Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels			
Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels.			
After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated			
<u>SCREEDS (Note: FM II Finish to Screed)</u>			
<u>Screeds wood floated, on concrete</u>			
1	30mm Thick on floors	m2	1 720
2	Average 40mm Thick on floors	m2	84
Carried Forward			R
Bill No. 14 Plastering			

Brought Forward			R
<u>GRANOLITHIC</u>			
<u>Untinted granolithic on concrete</u>			
3	25mm Thick on floors	m2	148
4	75mm Skirting	m	103
<u>INTERNAL PLASTER</u>			
<u>One coat plaster on brickwork:</u>			
5	On walls	m2	2 063
6	On walls in patches	m2	582
7	On narrow widths	m2	144
<u>One coat 6mm "Gyproc" Rhinolite gypsum skimming compound on plaster with and including bonding compound as per manufacturers specification</u>			
8	On existing walls	m2	3 397
<u>EXTERNAL PLASTER</u>			
<u>One coat plaster on brickwork:</u>			
9	On walls	m2	164
10	On walls in patches	m2	451
11	On narrow widths	m2	11
Carried to Summary			R
Bill No. 14 Plastering			

Item No	Quantity	Rate	Amount
<u>BILL NO. 15</u>			
<u>TILING</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Fixing</u>			
<p>Unless described as 'fixed with adhesive to plaster (plaster elsewhere)' descriptions of tiling on brick or concrete walls, columns, etc. shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc. shall be deemed to include 1:3 screed</p>			
<p>Tiling described as 'fixed with adhesive on power floated concrete' shall be deemed to include for approved tiling key-coat</p>			
<p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the 'Tal' or other equally approved range of products as recommended by the manufacturer of the tiles</p>			
<p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the 'Tal' or other equally approved range of products as recommended by the manufacturer of the tiles</p>			
<u>WALL TILING</u>			
Carried Forward		R	
Bill No. 15 Tiling			

Brought Forward			R
<u>300 x 300mm High Gloss Black (Code SE20A POL 3x6 AH) wall tiles fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to plastered walls (plaster elsewhere) and flush pointed with " Tal Wall or Floor" anti-bacterial grout in accordance with the manufacturers instruction:</u>			
1	Tiles to walls	m2	1 453
2	Extra over wall tiling for narrow widths	m2	102
3	Extra over tiling for circular cutting around piping not exceeding 50mm diameter	No	417
4	Extra over tiling for circular cutting around piping not exceeding 100mm diameter	No	110
5	Extra over tiling for circular cutting around piping not exceeding 150mm diameter	No	47
<u>FLOOR TILING</u>			
<u>600 x 600mm High R10 slip rated full bodied porcelain floor (Code: UT=SEZZ6879N) tiles fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to power floated floors and flush pointed with " Tal Floor" anti-bacterial grout in accordance with the manufacturers instruction:</u>			
6	On floors	m2	657
<u>600 x 600mm High R10 slip rated full bodied porcelain floor (Code: UT=SEZZ6876N) tiles fixed with "'Tal Goldstar 6' and Tal Bond" tile adhesive to power floated floors and flush pointed with " Tal Floor" anti-bacterial grout in accordance with the manufacturers instruction:</u>			
7	On floors	m2	1 063
8	Extra over tiles for 100mm high skirting	m	632
<u>Mosaic tiles to bathrooms, allow a budgetary allowance of R500.00/m² for purchase of mosaic tiling</u>			
9	To shower floors	m2	84
Carried Forward			R
Bill No. 15			
Tiling			

[illegible]

Item No	Quantity	Rate	Amount
<u>BILL NO. 16</u>			
<u>PLUMBING AND DRAINAGE</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades, Supplementary Preambles and Project Specification which are incorporated at the front of these Bills of Quantities.</p>			
<p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers instructions. Where no manufacturers instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L :Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SANS 1200</p>			
<p>Descriptions for pipes below ground shall be deemed to include excavations, backfilling, compaction and carting away of surplus material from site.</p>			
<p>Bedding of drain pipes shall be in accordance with sans 1200 LB - 'Class 'C' for rigid pipes and 'flexible' for uPVC pipes.</p>			
<p>No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.</p>			
<p>Prices for installation of all taps, valves, etc, shall in all cases be deemed to include for the necessary couplings required for connecting to pipework whether specifically described or not.</p>			
Carried Forward		R	
<p>Bill No. 16 Plumbing and Drainage</p>			

Brought Forward			R
<u>RAINWATER DISPOSAL</u>			
<u>1.6mm Gauge aluminium gutter box</u>			
1	250 x 200mm High purpose made box gutter	m	129
2	Extra over gutter box for stop end	No	18
3	Extra over gutter box for 110mm outlet	No	16
<u>"Marley" or other equally approved uPVC downpipes</u>			
4	110mm Diameter rainwater pipe	m	77
5	Extra over 110mm rainwater pipe for bend	No	32
6	Extra over 110mm rainwater pipe for shoe	No	16
<u>SANITARY FITTINGS</u>			
<u>WC</u>			
7	"Vaal Sanitaryware" or other equally approved vitreous china Parktown 90 degree outlet top inlet or back inlet flush valve (code: 431600) and double flap plastic seat	No	44
8	"Grohe" or other equally approved 25mm diameter chrome flush valve for wc (code: 37609) for concealed installation with push button actuator, 1.2 - 5.0 bar flow pressure, flow rate adjustment, including 25mm supply pipe, stop valve, flush pipe and 300mm extension pipe to wc	No	44
<u>Wash Hand Basin</u>			
9	"Vaal Sanitaryware" or other equally approved Iceberg Vitreous china drop-in vanity basin colour White (Code: 7034), size 420 x 420mm fitted into opening in granite vanity top (vanity top elsewhere measured) and sealed with silicone sealant where basin rim meets vanity top.	No	82
10	"Idral" or other equally approved water save self-closing push button pillar tap, non-hold cold water supply only, chrome finish, (code: 08212) with flow time of 6 - 9 seconds.	No	82
11	GH angle valve bau 15x15mm	No	164
Carried Forward			R
Bill No. 16 Plumbing and Drainage			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward			R
12	303-32 Basin waste	No	82
13	ISM Gio bottle trap CP 32mm	No	82
<u>WC (Paraplegic)</u>			
14	"Whyte House" or other equally approved paraplegic WC (code: 025134) with back inlet flush valve & double flap plastic seat.	No	3
15	"Grohe" or other equally approved 25mm diameter chrome flush valve for wc (code: 37609) for concealed installation with push button actuator, 1.2 - 5.0 bar flow pressure, flow rate adjustment, including 25mm supply pipe, stop valve, flush pipe and 300mm extension pipe to wc	No	3
<u>Wash Hand Basin (Paraplegic)</u>			
16	"Vaal Sanitaryware" or other equally approved hibiscus vitreous china lavatory basin colour white (code: 7023), size 510 x 405mm with one tap hole including integrated overflow and chain stay hole bolted to wall with two x 10mm bolts (code: 8448Z0) and including universal half pedestal with hanger springs (code: 715221) and sealed with silicone sealant where basin meets wall.	No	3
17	"Cobra" or other equally approved medical elbow action pillar tap with high waist, chrome finish, manufactured in accordance with SANS 226 Type 2.	No	3
18	GH angle valve 15x10mm	No	6
19	303-32 Basin waste	No	3
20	ISM Gio bottle trap CP 32mm	No	3
Carried Forward			R
Bill No. 16 Plumbing and Drainage			

Brought Forward			R
<u>Urinals</u>			
21	"Vaal Sanitaryware" or other equally approved 565 x 275 x 310mm sweetpea white vitreous china wall mounted back inlet urinal (code: 705127) including 38mm chromium plated domical grating (code: 8787z0) and chromium plated back inlet spreader (code: 7054z2), flush valve, flush pipe and fittings (by others), fixed on and including two hanger brackets (code: 8127z0).	No	25
22	"Walcro" or other equally approved 15mm Ø BSP built-in sleeve, DZR brass urinal flush valve (code: 155UW) with internal flow control, strainer and no-hold feature for single bowl urinal.	No	25
<u>Kitchen Sink - Double Bowl</u>			
23	"Franke" or other equally approved Projectline Model PLN621 stainless steel double end bowl inset sink (Code: 821048), overall size 1160 x 460mm wide with two 340 x 370 x 152mm deep bowls, fitted onto cupboard (cupboard elsewhere measured) including clear silicon, 38mm waste fitting and PVC traps (traps elsewhere measured).	No	8
24	"Cobra Watertech Noka" or other equally approved 15mm chrome plated deck mounted sink mixer with overarm swivel outlet and adjustable flanges (code: NA-970), manufactured in accordance with SANS 226:2004 Type 1 (BS 5412).	No	8
25	GH angle valve bau 15x10mm	No	16
26	32 x 40mm Butyl rubber "P" or "S" trap jointed to waste outlet fitting and uPVC pipe including clamps	No	8
<u>Showers</u>			
27	"Cobra Watertech Noka" or other equally approved 15mm chrome plated wall mounted under wall mixer (code: NA-956), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	84
Carried Forward			R
Bill No. 16 Plumbing and Drainage			

	Brought Forward			R
28	"Franke Aquajet- Slimline Aqua 750" or other equally approved stainless steel shower head (code: 359747) with plastic jet face with calcification system and pluggable connection spigot.	No	84	
29	"Cobra Watertech" or other equally approved 40mm rough brass shower p trap (code: 373SQ) with shallow seal and chrome plated square grating.	No	84	
	<u>Floor Drains</u>			
30	"Seaqual" or other equally approved floor drain size 250x250 x 75mm deep with grating to suite and with 100mm diameter outlet and set in position and installed as per manufacturer's instructions	No	24	
	<u>TAPS, VALVES, ETC.</u>			
	Taps, valves, etc. jointed to copper pipes are to include brass connectors, adaptors etc. Installation and fixings to be as per manufacturers specifications and SANS 1808-9 compliant.			
31	15mm Ball-O- stop valves	No	32	
32	22mm Ball-O- stop valves	No	3	
33	28mm Ball-O- stop valves	No	3	
34	32mm Ball-O- stop valves	No	9	
35	42mm Ball-O- stop valves	No	14	
36	54mm Ball-O- stop valves	No	7	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes cast into concrete slabs, fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications</u>			
37	50mm Pipes	m	401	
	Carried Forward			R
	Bill No. 16 Plumbing and Drainage			

	Brought Forward			R
38	110mm Pipes	m	535	
	<u>Extra over uPVC pipes for:</u>			
39	50mm Bend	No	450	
40	50mm Access bend	No	43	
41	50mm Junction	No	50	
42	50mm Access junction	No	51	
43	110mm Bend	No	134	
44	110mm Access bend	No	72	
45	110mm Access junction	No	48	
46	110mm Double access junction	No	10	
47	110 x 50mm Access junction	No	95	
48	110mm Pan connector	No	47	
49	110mm Two way vent valve	No	28	
50	110mm Coupling	No	8	
51	110mm Rodding eye	No	2	
	<u>DOMESTIC WATER SUPPLIES</u>			
	<u>WATER SUPPLIES</u>			
	<u>Geberit Mepla or other equally approved pipes fixed to soffit and walls, or chased into walls, chased into concrete, etc. in accordance with manufacturers specifications:</u>			
	All piping embedded into concrete or chased into walls to be twice wrapped in strong approved building paper.			
	Rates for surface mounted copper pipe shall be deemed to include all fixtures and fittings for pipes fixed to walls, in chases, and in ceilings.			
52	16mm Pipes	m	1 481	
	Carried Forward			R
	Bill No. 16 Plumbing and Drainage			

Alteration and Addition Works Springfield Rolling Stock

Brought Forward				R
53	20mm Pipes	m	389	
54	26mm Pipes	m	320	
55	32mm Pipes	m	95	
56	40mm Pipes	m	221	
57	50mm Pipes	m	105	
<u>Extra over Mepla or other equally approved pipes for fittings:</u>				
58	15mm Fittings	No	926	
59	22mm Fittings	No	224	
60	26mm Elbow	No	164	
61	26mm Tees	No	7	
62	26 x 16mm Tees	No	16	
63	26 x 20mm Tees	No	3	
64	26mm Reducer	No	5	
65	26mm Stop end	No	2	
66	32mm Elbow	No	3	
67	32 x 15mm Elbow	No	8	
68	32mm Tees	No	2	
69	32 x 15mm Tees	No	104	
70	32 x 20mm Tees	No	1	
71	32 x 26mm Tees	No	1	
72	32mm Reducer	No	6	
73	32mm Stop end	No	4	
74	40mm Elbow	No	10	
Carried Forward				R
Bill No. 16 Plumbing and Drainage				

Alteration and Addition Works Springfield Rolling Stock

Brought Forward			R
75	40mm Tees	No	10
76	40 x 15mm Tees	No	119
77	40 x 20mm Tees	No	7
78	40 x 25mm Tees	No	26
79	40 x 32mm Tees	No	1
80	40mm Reducer	No	11
81	40mm Stop end	No	7
82	50mm Elbow	No	15
83	50mm Tees	No	1
84	50 x 15mm Tees	No	24
85	50 x 20mm Tees	No	7
86	50 x 25mm Tees	No	21
87	50 x 32mm Tees	No	1
88	50 x 40mm Tees	No	1
89	50mm Reducer	No	7
<u>Extra over Mepla or other equally approved pipes for brass compression fittings:</u>			
90	15mm Flexible service pipe 300mm girth	No	183
91	15mm Wall plate elbow	No	244
92	22mm Wall plate elbow	No	25
93	28mm Wall plate elbow	No	48
94	15mm Coupling	No	22
95	22mm Coupling	No	3
96	28mm Coupling	No	2
Carried Forward			R
Bill No. 16 Plumbing and Drainage			

Brought Forward			R
97	35mm Coupling	No	2
98	42mm Coupling	No	4
99	54mm Coupling	No	7
<u>PIPE INSULATION</u>			
<u>Thermaflex snap on sectional pipe insulation, neatly cut around pipe as required</u>			
100	Insulation to 16mm diameter piping and couplings including working around fittings	m	610
101	Insulation to 20mm diameter piping and couplings including working around fittings	m	104
102	Insulation to 26mm diameter piping and couplings including working around fittings	m	16
103	Insulation to 32mm diameter piping and couplings including working around fittings	m	52
104	Insulation to 40mm diameter piping and couplings including working around fittings	m	123
<u>ELECTRIC WATER HEATERS</u>			
<u>Water heaters and accessories:</u>			
105	10 Litre "Hydroboil" or other equally approved over sink electric water heater	No	8
106	'Kwikot' or other equally approved 10 litre high pressure (EF100-2D) hot water heater and hoist and fix vertical on walls including fixing to wall mounting brackets, draincock, vacuum breaker, multi pressure control, isolator, expansion relief valve, safety valve, water overflow pipe including fittings, necessary fixing accessories and two connections for 22mm copper pipes including connectors (electrical connection by Electrician).	No	5
Carried Forward			R
Bill No. 16 Plumbing and Drainage			

Brought Forward		R	
<u>TESTING</u>			
107	Allow for testing the whole of the Stormwater drainage, Sewer drainage, Plumbing, Water and Fire supplies and all fittings to the satisfaction of the Architect, Engineer and Local Authorities. All defective work is to be taken out and replaced at the contractor's expense and the whole re-tested until acceptable	Item	
<u>AS-BUILT DRAWINGS</u>			
108	Provide a full set of as-built drawings on completion of the installation	Item	
<u>BUDGETARY ALLOWANCE</u>			
<u>Budgetary Allowance</u>			
Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances			
109	Provide the sum of R250,000.00 (Two Hundred and Fifty Thousand Rand) for Fire Protection Installation.	Item	250 000,00
110	Provide the sum of R600,000.00 (Six Hundred Thousand Rand) for Boilers and Heat Pumps.	Item	600 000,00
Carried to Summary		R	
Bill No. 16 Plumbing and Drainage			

Item No		Quantity	Rate	Amount
<u>BILL NO. 17</u>				
<u>ELECTRICAL WORK</u>				
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.				
<u>PREAMBLES</u>				
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.				
<u>ELECTRICAL INSTALLATION</u>				
<u>Electrical Installation</u>				
1	Provide the sum of R 3 342 850.00 (Three Million, Three Hundred and Forty Two Thousand Eight Hundred and Fifty Rand) for Electrical Installation complete.	Item		3 342 850,00
2	Profit	Item		
3	Attendance	Item		
Carried to Summary				R
Bill No. 17 Electrical Work				

Item No	Quantity	Rate	Amount
<u>BILL NO. 18</u>			
<u>MECHANICAL WORK</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>Budgetary Allowance</u>			
Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances			
<u>Air-Conditioning Installation Complete</u>			
1	Item		704 400,00
2	Item		
3	Item		
<u>Air Ventilation and Extraction</u>			
4	Item		150 000,00
5	Item		
6	Item		
Carried to Summary			R
Bill No. 18 Mechanical Work			

[illegible]

Item No	Quantity	Rate	Amount
<u>BILL NO. 20</u>			
<u>PAINTWORK</u>			
<u>PREAMBLES</u>			
The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PAINT SPECIFICATIONS</u>			
<u>Painting, etc.</u>			
All painting shall be done in accordance with SANS specifications unless otherwise described			
<u>COLOURS</u>			
<u>Colours, etc.</u>			
Unless otherwise described all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accordance with SANS 1091			
<u>PAINTWORK, ETC. TO PREVIOUSLY PAINTED SURFACES</u>			
<u>ON EXTERNAL FLOATED PLASTER SURFACES</u>			
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved alkali resistant primer and two coats "Micatex" emulsion paint for exterior use</u>			
1	On walls	m2	1 078
2	On narrow widths	m2	67
<u>ON INTERNAL FLOATED PLASTER SURFACES</u>			
Carried Forward			R
Bill No. 20 Paintwork			

Brought Forward			R
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved Primer (PP700) and two coats "Velvagio" water based paint for interior use</u>			
3	On walls	m2	1 432
4	On narrow widths	m2	67
<u>ON METAL SURFACES</u>			
<u>Prepare and sand down existing surfaces and apply "Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>			
5	On door frames, etc.	m2	128
6	On window frames	m2	499
7	On balustrade	m2	1 164
<u>ON EXISTING CONCRETE FLOOR SURFACES</u>			
<u>Prepare floors including all necessary degreasing, patching, grinding and sanding, prime with 'Flowshield Primer' and apply 4-6mm thick self levelling 'Flowshield' or other equally approved epoxy</u>			
8	On floors	m2	1 409
9	75mm High Skirting	m	775
<u>PAINTWORK, ETC. TO NEW SURFACES</u>			
<u>ON INTERNAL FLOATED PLASTER SURFACES</u>			
<u>"Plascon" or other equally approved Primer (PP700) and two coats "Velvagio" water based paint for interior use</u>			
10	On walls	m2	610
11	On narrow widths	m2	42
<u>ON INTERNAL GYPSUM PLASTER SURFACES</u>			
Carried Forward			R
Bill No. 20 Paintwork			

Brought Forward			R
	<u>"Plascon" or other equally approved gypsum primer (PP700) and two coats "Velvaglo" water based paint for interior use</u>		
12	On walls	m2	3 397
	<u>ON WOOD SURFACES</u>		
	<u>"Plascon" or other equally approved primer, one coat alkyd based universal undercoat and two coats professional gloss enamel paint</u>		
13	On doors	m2	580
14	On door frames, etc.	m2	68
	<u>"Plascon" or other equally approved two coats woodcare ultra vanish</u>		
15	On benches	m2	23
	<u>ON METAL SURFACES</u>		
	<u>One coat calcium plumbate primer on:</u>		
16	Backs of galvanised steel door frames before fixing	m2	89
	<u>"Plascon" or other equally approved one coat red oxideon primer, one coat alkyd based universal undercoat and two coats professional gloss enamel (PBS 1000) paint</u>		
17	On door frames, etc.	m2	89
18	On balustrades	m2	1 933
	<u>ON CONCRETE FLOOR SURFACES</u>		
	<u>Prepare floors including all necessary degreasing, patching, grinding and sanding, prime with 'Flowshield Primer' and apply 4-6mm thick self levelling 'Flowshield' or other equally approved epoxy</u>		
19	On floors	m2	74
20	75mm High Skirting	m	57
	Carried to Summary		R
	Bill No. 20		
	Paintwork		

Item No		Quantity	Rate	Amount
	<u>BILL NO. 21</u>			
	<u>EXTERNAL WORKS</u>			
	<u>PREAMBLES</u>			
	The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , "Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.			
	<u>WATER SUPPLIES TO DOMESTIC</u>			
	<u>"HDPE" or other approved pipes with solvent welded joints</u>			
1	16mm Pipes laid in trenches (No excavations)	m	25	
2	16mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	61	
3	20mm Pipes laid in trenches (No excavations)	m	4	
4	20mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	9	
5	25mm Pipes laid in trenches (No excavations)	m	3	
6	25mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	6	
7	32mm Pipes laid in trenches (No excavations)	m	3	
8	32mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	6	
9	40mm Pipes laid in trenches (No excavations)	m	5	
10	40mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	11	
11	50mm Pipes laid in trenches (No excavations)	m	8	
	Carried Forward		R	
	Bill No. 21 External Works			

	Brought Forward			R
12	50mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	20	
13	75mm Pipes laid in trenches (No excavations)	m	6	
14	75mm Pipes laid in trenches including excavations, risk of collapse, backfilling, etc.	m	356	
	<u>Extra over HDPE Pipes for Electroweld Fusion couplings for Fittings</u>			
15	16mm Elbow	No	48	
16	20mm Elbow	No	7	
17	25mm Elbow	No	4	
18	32mm Elbow	No	4	
19	40mm Elbow	No	9	
20	50mm Elbow	No	15	
21	75mm Elbow	No	28	
22	75mm Tee	No	2	
23	75 x 16mm Tee	No	24	
24	75 x 20mm Tee	No	3	
25	75 x 25mm Tee	No	2	
26	75 x 32mm Tee	No	2	
27	75 x 40mm Tee	No	4	
28	75 x 50mm Tee	No	8	
	<u>Isolating valve chamber</u>			
29	Excavate in ground for and build valve chamber 630 x 630 x 1000mm deep of pre-cast concrete chamber rings with dry joints with 100mm (10MPa) thick concrete base, 150mm thick (20Mpa) concrete slab fitted with and including 102mm diameter cast iron hinged cover and frame.	No	1	
	Carried Forward			R
	Bill No. 21 External Works			

Brought Forward			R
<u>Extra over isolating valve chamber</u>			
30	50mm Gate Valve	No	1
<u>Testing</u>			
31	Allow for testing the whole domestic water supplies as directed by the Employer or his agents and for re-testing after replacing any defective work to his satisfaction. The contractor is to provide all testing apparatus and labour and is to follow the instructions implicitly.		Item
<u>SOIL DRAINAGE</u>			
<u>Heavy duty uPVC class 34 pipes in class C bedding:</u>			
32	110mm Pipes vertically or ramped to cleaning eyes etc. (no excavation)	m	69
33	110mm Pipes laid in and including trenches not exceeding 1m deep	m	104
34	160mm Pipes laid in and including trenches not exceeding 1m deep	m	156
35	160mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	227
<u>Extra over class 34 uPVC pipes for fittings:</u>			
36	110mm Bend	No	149
37	160mm Bend	No	4
38	160mm Access junction	No	2
39	160 x 110mm Access junction	No	69
40	110 x 50mm Reducer	No	3
41	110 x 75mm Reducer	No	7
42	110mm Rodding Eye including surround slab	No	10
Carried Forward			R
Bill No. 21 External Works			

Brought Forward			R
<u>Manholes, etc:</u>			
43	Precast concrete manhole rings (SABS 1294) size internally 1000mm diameter not exceeding 1000mm deep internally including all excavations, backfilling, etc. internally 1000mm diameter	No	13
<u>Gratings, covers, etc:</u>			
44	1130mm diameter precast heavy duty cover slab and lid	No	13
<u>Alterations to existing manholes etc.:</u>			
45	Break through precast concrete situated on side of manhole for and connect up new 160mm uPVC pipe (elsewhere measured) and make good all round including new channels, benching, etc.	No	1
<u>Testing</u>			
46	Allow for testing all the soil drainage lines as directed by the Employer or his agents and for re-testing after replacing any defective work to his satisfaction. The contractor is to provide all testing apparatus and labour and is to follow the instructions implicitly.		Item
<u>Sundries</u>			
47	Excavate for and construct gulley comprising of 110mm uPVC gulley trap with 190mm diameter uPVC hopperhead with pvc grating, all set in mass concrete and not exceeding 500mm deep. The top of the gulley to be raised 75mm above surrounding ground level and internally dished down to hopper head with smoothed render and external of raised sides to be finished neatly.	No	37
<u>ROADWORK, PARKING AREAS AND PAVING</u>			
<u>Carefully saw-cut and break up and remove damaged premix layer including reducing ground by 150mm deep</u>			
48	Damaged asphalt in patches	m2	688
Carried Forward			R
Bill No. 21 External Works			

**Alteration and Addition Works
Springfield Rolling Stock**

Brought Forward			R
<u>Excavation in earth not exceeding 2m deep</u>			
49	Over site between buildings, retaining walls, etc. to reduce levels and dispose in prescribed stock piles on site	m3	337
<u>Extra over bulk excavation in earth for excavation in</u>			
50	Soft rock	m3	34
<u>Extra over bulk excavation in earth for breaking up and removing</u>			
51	Reinforced concrete	m3	8
<u>Extra over all excavations for carting away</u>			
52	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	337
<u>Earth filling supplied by the contractor under parking areas, roadways, etc.</u>			
53	Sub-base course of G7 material, stabilised with 4% cement in accordance with SABS 1200 DM, compacted to 98% Mod AASHTO density	m3	103
54	Sub-base course of G5 material, stabilised with 4% cement in accordance with SABS 1200 DM, compacted to 98% Mod AASHTO density	m3	103
55	Sub-base course of G2 material compacted to 98% Mod AASHTO density	m3	103
<u>Compaction of surfaces</u>			
56	Compaction of ground surfaces under pavings etc., including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	688
Carried Forward			R
Bill No. 21 External Works			

Brought Forward			R
<u>Precast concrete finished smooth on exposed surfaces, including bedding, jointing and pointing</u>			
57	150 x 300mm High kerbs (SANS 927 fig 3) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc.	m	41
<u>Pesticides:</u>			
58	Spray base course with an approved brand insecticide in accordance with manufacturers instructions.	m2	688
<u>Bituminous premix road surfacing</u>			
59	Prime and lay 40mm thick 40/50 pen. Bitumen 9.5mm Stone, laid compacted, to falls	m2	688
<u>Paintwork</u>			
<u>Two coats 'Plascon' or other equally approved road marking paint including setting out, etc. in accordance with the Provincial Road Department specification and standards in</u>			
60	100mm Wide solid lines to parking demarcation bays, etc.	m	375
61	1,0m Long directional arrows	No	14
62	1,3m Long letters to 'STOP' sign, etc.	No	3
63	Disabled parking bay sign approximately 1,2m high	No	4
<u>PROVING OF EXISTING SERVICES</u>			
No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services, which may be damaged thereby.			
Any damage shall be reported immediately to the Principal Agent, or to the personnel in charge at the nearest station.			
Any previously uncharted underground services encountered by the Contractor during the course of his activities shall be reported immediately to the Principal Agent who shall ensure necessary inclusion in the "as built" drawings.			
Carried Forward			R
Bill No. 21 External Works			

Brought Forward			R
<p>Any claims relating to standing time costs resulting from proving of services shall be for the Contractors account. The services are stated below but are limited to and is to be identified by the Engineer when encountered on site. The contractor is to make reasonable allowance for possible delays and standing time in his rates for tasks relating to works undertaken in the various trades with and including in the Preliminaries & General. The Contractor is to familiarize himself/herself with the possible services prior to pricing the bills of quantities.</p> <p>The contractor is to take into account the following services but not limited to:</p> <ol style="list-style-type: none"> 1. Electrical lines 2. Stormwater lines 3. Sewer lines 4. Domestic or potable water supply lines 5. Fire water supply lines <p><u>Restrictive excavations for proving of services</u></p> <p><u>Restrictive excavations in earth not exceeding 2m deep</u></p>			
64	Trenches	m3	194
<u>Extra over restrictive excavations in earth for excavation in</u>			
65	Intermediate rock	m3	19
<u>Extra over bulk excavation in earth for breaking up and removing</u>			
66	Reinforced concrete	m3	8
67	Brickworks	m3	12
<u>Risk of collapse of excavations</u>			
68	Sides of trench and hole excavation not exceeding 1,5m deep	m2	258
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod. AASHTO density</u>			
69	Backfilling to trenches	m3	194
Carried Forward			R
Bill No. 21 External Works			

Alteration and Addition Works

Springfield Rolling Stock

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Item No	Quantity	Rate	Amount
<u>BILL NO. 22</u>			
<u>PROVISIONAL SUMS</u>			
<u>PREAMBLES</u>			
<p>The descriptions given in the various items below are not necessary full and complete and reference must be made to the "Standard Preambles to All Trades" , " Supplementary Preambles" and "Supplementary Specifications" to this contract for the full requirement of each schedule item.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>General</u>			
<p>Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances</p>			
<p>Prime cost amounts and provisional sums are net.</p>			
<p>The Contractor must note that attendance includes the provision of hoisting and access facilities for a sub-contractor.</p>			
<p>The Contractors profit and attendance shall include for the storage of such equipment and materials.</p>			
<p>The Contractor must ensure that the capacities of his hoisting equipment is sufficient to deal with the masses and the quantities of the items hoisted.</p>			
<p>Provide the necessary personnel to operate such hoisting and access equipment.</p>			
<p>Prime cost amounts include for delivery to site of all articles concerned Provisional sums are for material and equipment supplied and installed complete by firms of specialists</p>			
Carried Forward			R
<p>Bill No. 22 Provisional Sums</p>			

Brought Forward		R	
<u>SIGNAGE</u>			
1	Provide the sum of R 75,000.00 (Seventy Five Thousand Rand) for signage	Item	75 000,00
2	Profit	Item	
3	Attendance	Item	
<u>LANDSCAPING</u>			
4	Provide the sum of R 50,000.00 (Fifty-Thousand Rand) for landscaping	Item	50 000,00
5	Profit	Item	
6	Attendance	Item	
<u>TEMPORARY ACCOMMODATION</u>			
7	Provide the sum of R 300,000.00 (Three Hundred Thousand Rand) for temporary accommodation	Item	300 000,00
8	Profit	Item	
9	Attendance	Item	
Carried to Summary		R	
Bill No. 22 Provisional Sums			

**Alteration and Addition Works
Springfield Rolling Stock**

<u>FINAL SUMMARY</u>		Page No	Amount	
Bill No				
1	Preliminaries and General	38		
2	Alterations	48		
3	Earthworks	52		
4	Concrete, Formwork and Reinforcement	56		
5	Precast Concrete	57		
6	Masonry	60		
7	Waterproofing	62		
8	Roof Covering	67		
9	Carpentry and Joinery	71		
10	Ceilings, Partitions and Access Flooring	73		
11	Ironmongery	81		
12	Structural Steel	84		
13	Metalwork	92		
14	Plastering	94		
15	Tiling	97		
16	Plumbing and Drainage	107		
17	Electrical Work	108		
18	Mechanical Work	109		
19	Glazing	110		
20	Paintwork	113		
21	External Works	121		
22	Provisional Sums	123		
	Sub - Total		R	
	Carried Forward		R	

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