

Item No	Quantity	Rate	Amount R
<u>SECTION 1</u> <u>BILL NO 1</u> <u>PRELIMINARIES</u> <u>BUILDING AGREEMENT AND PRELIMINARIES</u> <p>The J B C C Principal Building Agreement (March 2014 Edition 6.1) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The JBCC Principal Building Agreement contract data form an integral part of this agreement</p> <p>The ASAQS Preliminaries (March 2014 edition) published by the Association of South African Quantity Surveyors for use with the JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities</p> <p>The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause</p> <p>The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this agreement such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents</p> <p>Where any item is not relevant to this agreement such item is marked N/A (signifying "not applicable")</p> <u>PREAMBLES FOR TRADES</u> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p>			
Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			R

Item No		Quantity	Rate	Amount R
1	<p>Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the 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</p> <p><u>PRICING OF PRELIMINARIES</u></p> <p>Should the contractor select Option A in terms of clause 26.9.4 of 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><u>SECTION A - PRINCIPAL BUILDING</u></p> <p><u>AGREEMENT</u></p> <p><u>Interpretation (A1 - A7)</u></p> <p>Clause 1.0 - Definitions and Interpretation</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, imposts, establishment charges, overheads, profit and all other obligations arising out of the agreement</p> <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 plant, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary</p> <p>Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<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>			
2	<p>Clause 2.0 - Law, regulations and notices</p> <p>Health and safety</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. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to Part C4 : Site Information, Clause C4.5 for a copy of the relevant specification) 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 provisions of the aforementioned health and safety specification</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 <p>Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>	Item		
			R	

Item No		Quantity	Rate	Amount R
	<p>4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification</p> <p>5. Conform to the conditions contained in the employer's safety specification</p> <p>F:..... V:..... T:.....</p>			
		Item		
3	<p>Clause 3.0 - Offer and Acceptance</p> <p>F:..... V:..... T:.....</p>			
		Item		
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>Contract drawings</p> <p>Refer to Part C4 : Site Information, Clause C4.9 for a list of the contract drawings</p> <p>Priced document as specification</p> <p>The priced document shall not be used as a specification of materials and or methods.</p> <p>F :..... V:..... T:.....</p>			
		Item		
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
6	Clause 6.0 - Employer's Agents			
	F : V: T:	Item		
7	Clause 7.0 - Design responsibility.			
	Tenderer's attention is drawn to the fact that it is a condition of this tender that a contractor will be expected to design and install piling to specified loadings, to the approval of the project engineer. Tenderers will therefore take full design responsibility for this item, and should include any design related costs, including costs for indemnification of the employer in this regard.			
	F : V: T:	Item		
	<u>Insurance and Security (A8 - A11)</u>			
8	Clause 8.0 - Works risk			
	F : V: T:	Item		
9	Clause 9.0 - Indemnities			
	F : V: T:	Item		
10	Clause 10.0 - Insurances (Refer to Contract Data for specifications)			
	F : V: T:	Item		
11	Clause 11.0 - Security (Refer to Contract Data for specifics)			
	F : V: T:	Item		
	<u>Execution (A12-A17)</u>			
12	Clause 12.0 - Duties of the Parties			
	F : V: T:	Item		
	Carried to Collection		R	
	Bill No. 1			
	PRELIMINARIES			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
13	Clause 13.0 - Setting out Encroachments The contractor shall notify the principal agent if any encroachment of adjoining foundations, buildings, structures, pavements, boundaries, services, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments F : V: T:	Item		
14	Clause 14.0 - Nominated Subcontractors F : V: T:	Item		
15	Clause 15.0 - Selectred Subcontractors F : V: T:	Item		
16	Clause 16.0 - Direct Contractors 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 2. Allow the use of personnel welfare facilities, where provided 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 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] F : V: T:	Item		
	Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN		R	

Item No		Quantity	Rate	Amount R
17	Clause 17.0 - Contract Instructions Site instructions 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 F : V: T: Completion A18 - A24)	Item		
18	Clause 18.0 - Interim completion F : V: T:	Item		
19	Subclause 19.0 - Practical completion F : V: T:	Item		
20	Subclause 20.0 - Sectional completion F : V: T:	Item		
21	Clause 21.0 - Defects liability period and Final completion F : V: T:	Item		
22	Clause 22.0 - Latent Defects liability period F : V: T:	Item		
Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			R	

Item No		Quantity	Rate	Amount R
23	Clause 23.0 - Revision of the Date for Practical completion Substitution of materials and goods 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] F : V: T:	Item		
24	Clause 24.0 - Penalty for late or non-completion F : V: T:	Item		
	<u>Payment (A25 - A27)</u>			
25	Clause 25.0 - Payment Materials and goods stored off site Materials and goods stored off site shall not be included in the amount authorised for payment unless Advanced Payment Guarantee provided Fluctuations in costs 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] Prices submitted 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 the 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 F : V: T:	Item		
	Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN		R	

Item No		Quantity	Rate	Amount R
26	<p>Clause 26.0 - Adjustment to 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. 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. 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. 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 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 loss</p> <p>F : V: T:</p> <p>Suspension and termination (A28 - A29)</p>			
		Item		
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		
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
30	Clause 30.0 - Dispute resolution F : V: T:	Item		
<u>SECTION B - PRELIMINARIES</u>				
<u>Interpretation (B1)</u>				
31	Clause 1.1 - Definitions F : V: T:	Item		
32	Clause 1.2 - Interpretation F : V: T:	Item		
<u>Documents (B2)</u>				
33	Clause 2.1 - Checking of documents F : V: T:	Item		
34	Clause 2.2 - Provisional bills of quantities F : V: T:	Item		
35	Clause 2.3 - Availability of construction documentation The budgetary allowances and selected subcontract amounts allocated for subsequent trades included in this document will be separately procured, based on selected subcontractors during the construction period F : V: T:	Item		
<u>Previous work and adjoining properties (B3)</u>				
36	Clause 3.1 - Previous work - dimensional accuracy F : V: T:	Item		
37	Clause 3.2 - Previous work - defects F : V: T:	Item		
Carried to Collection			R	
Bill No. 1				
PRELIMINARIES				
THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
38	Clause 3.3 - Inspection of adjoining properties F : V: T:	Item		
	<u>Samples, shop drawings and manufacturer's instructions (B4)</u>			
39	Clause 4.1 - Samples of materials F : V: T:	Item		
40	Clause 4.2 - Workmanship samples F : V: T:	Item		
41	Clause 4.3 - Shop drawings F : V: T:	Item		
42	Clause 4.4 - Compliance with manufacturer's instructions F : V: T:	Item		
	<u>Deposits and fees (B5)</u>			
43	Clause 5.1 - Deposits and fees F : V: T:	Item		
	<u>Temporary services (B6)</u>			
44	Clause 6.1 - Water F : V: T:	Item		
45	Clause 6.2 - Electricity F : V: T:	Item		
46	Clause 6.3 - Ablutions and welfare facilities F : V: T:	Item		
47	Clause 6.4 - Communication facilities F : V: T:	Item		
	Carried to Collection		R	
	Bill No. 1			
	PRELIMINARIES			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>Prime cost amounts (B7)</u>			
48	Clause 7.1 - Responsibility for prime cost amounts F : V: T:	Item		
	<u>Special attendance on nls subcontractors (B8)</u>			
49	Clause 8.1 - Special attendance F : V: T:	Item		
	<u>General (B9)</u>			
50	Clause 9.1 - Protection of the works F : V: T:	Item		
51	Clause 9.2 -Protection/isolation of existing/sectionally occupied works F : V: T:	Item		
52	Clause 9.3 - Security of the works F : V: T:	Item		
53	Clause 9.4 - Notice before covering work F : V: T:	Item		
54	Clause 9.5 - Disturbance F : V: T:	Item		
	Carried to Collection		R	
	Bill No. 1			
	PRELIMINARIES			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
55	<p>Clause 9.6 - Environmental disturbance</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 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>Environmental management plan</p> <p>The employer has prepared an environmental management plan (EMP) (Part C4 : Site Information, Clause C4.7 for a copy of the relevant plan). The contractor shall price opposite this item for compliance with all the requirements of such EMP</p> <p>F :..... V:..... T:.....</p>			
56	<p>Clause 9.7 - Works cleaning and clearing</p> <p>F :..... V:..... T:.....</p>	Item		
57	<p>Clause 9.8 - Vermin</p> <p>F :..... V:..... T:.....</p>	Item		
58	<p>Clause 9.9 - Overhand work</p> <p>F :..... V:..... T:.....</p>	Item		
<p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			R	

Item No		Quantity	Rate	Amount R
	<p><u>Schedule (B10)</u></p> <p>Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given, it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract</p> <p>10.1 - Provisional bills of quantities [clause 2.2]</p> <p>The quantities are provisional [Yes]</p> <p>10.2 - Availability of construction documentation [clause 2 3]</p> <p>Construction documentation is complete [No]</p> <p>10.3 - Previous work - dimensional accuracy [clause 3.1]</p> <p>Contractor to check dimensions on the drawings against previous work prior to execution [Yes]</p> <p>10.4 - Previous work - defects [clause 3.2]</p> <p>Contractor to inspect previous work and bring to the attention of the Principal Agent should there be noticeable defects [Yes]</p> <p>10.5 - Inspection of adjoining properties [clause 3.3] [N/A]</p> <p>10.6 - Water [clause 6.1]</p> <p>Option A (by contractor) [Yes] Option B (by employer - free of charge) [No] Option C (by employer - metered) [No]</p> <p>10.7 - Electricity [clause 6.2]</p> <p>Option A (by contractor) [Yes] Option B (by employer - free of charge) [No] Option C (by employer - metered) [No]</p> <p>10.8 - Ablution and welfare facilities [Clause 6.3]</p> <p>Option A (by contractor) [Yes] Option B (by employer - free of charge) [No]</p> <p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

Item No		Quantity	Rate	Amount R
	<p>10.9 - Communication facilities [clause 6.4]</p> <p>Option A (by contractor) [Yes] Option B (by employer) [No]</p> <p>10.10 - Protection of the works [Clause 9.1] [Yes]</p> <p>10.11 - Protection/isolation of existing/sectionally occupied works [clause 9.2] [N/A]</p> <p>10.12 - Disturbance [clause 9.5] [Yes]</p> <p>10.13 - Environmental disturbance [clause 9.6] [Yes]</p> <p><u>SECTION C - SPECIFIC PRELIMINARIES</u></p>			
59	<p>Site instructions</p> <p>Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor</p> <p>F : V: T:</p>	Item		
60	<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 certified completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor</p> <p>F : V: T:</p>	Item		
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

D134

Item No		Quantity	Rate	Amount R
61	<p>Co-operation of 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		
62	<p>Propping of floors below</p> <p>The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor</p> <p>F : V: T:</p>	Item		
63	<p>Testing of windows for watertightness</p> <p>Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means</p> <p>F : V: T:</p>	Item		
<p>Carried to Collection Bill No. 1 PRELIMINARIES THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>				R

D134

Item No		Quantity	Rate	Amount R
64	<p>Testing of flat roof waterproofing for watertightness</p> <p>Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing</p> <p>F :..... V:..... T:.....</p>			
		Item		
65	Profit on above item	Item		
66	Attendance on ditto	Item		
67	<p>The following clauses of the JBCC have been ammended and tenderers are advised to allow for any cost implication that may arise from these changes. Full details of the changes can be viewed under Part C1 : Agreement and Contract Data, appended to this Bill of Quantities; the clauses are;</p> <p>F :..... V:..... T:.....</p>			
		Item		
<p>Carried to Collection</p> <p>Bill No. 1</p> <p>PRELIMINARIES</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>				R

Bill No. 1

PRELIMINARIES

COLLECTION PAGE

Total Brought Forward from Page No.

**Page
No****Amount
R**

76

Total Brought Forward from Page No.

77

Total Brought Forward from Page No.

78

Total Brought Forward from Page No.

79

Total Brought Forward from Page No.

80

Total Brought Forward from Page No.

81

Total Brought Forward from Page No.

82

Total Brought Forward from Page No.

83

Total Brought Forward from Page No.

84

Total Brought Forward from Page No.

85

Total Brought Forward from Page No.

86

Total Brought Forward from Page No.

87

Total Brought Forward from Page No.

88

Total Brought Forward from Page No.

89

Total Brought Forward from Page No.

90

Total Brought Forward from Page No.

91

Total Brought Forward from Page No.

92

Carried to Final Summary

R

Bill No. 1

PRELIMINARIES

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 1</u></p> <p><u>ALTERATIONS</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions and Preambles</u></p> <p>The full descriptions of the items and all preambles in the previous and following trades, shall, unless otherwise stated, also be applicable to the relevant items in this trade.</p> <p><u>View site</u></p> <p>Before submitting this 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> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated.</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p>			
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>ALTERATIONS</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectively 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> <p>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately.</p> <p>Prices for taking out of windows, doors and frames, etc shall include for removal of all beads, architraves, ironmongery, doorstops, cabin hooks, etc and making good floor and wall finishes to match existing.</p> <p>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.</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied where necessary.</p> <p>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)</p> <p>The contractor must note that the demolition of all existing electrical and mechanical work has been measured and addressed under the electrical and mechanical tender documents.</p> <p>Any damage to existing electrical work will be for the contractors account.</p> <p>Removal of asbestos materials shall be executed in compliance with the regulations set out in the Occupational Health and Safety Act. It should be noted that removal of asbestos cement roof sheets has been handled as a separate contract done by others.</p>			
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>ALTERATIONS</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<p><u>Old materials to be carted away</u></p> <p>Old materials from the alterations, except where described to be re-used or handed over, as well as all rubbish, etc., must be regularly carted from the site and not be allowed to accumulate on or around the site.</p> <p><u>Old materials not to be re-used</u></p> <p>None of the old materials are to be used for new work except where specifically described to be set aside for re-use.</p> <p><u>Handing over of materials</u></p> <p>Where certain materials or articles from demolitions or articles are described as to be handed over by the Contractor to the Client, such materials or articles shall be properly stored by the contractor, until handing over thereof. The contractor must obtain an official receipt listing the materials or articles and dates of handing over.</p> <p>If the contractor fails to submit the receipt when requested, it shall be deemed that the materials or articles are still in his possession and he will be held liable to the Client for the full replacement value thereof, which amount will be deducted from any monies due to the contractor.</p> <p><u>Abbreviations</u></p> <p>For the purpose of this bill certain abbreviations have been made use of, the full meanings of which are as follows:</p> <p><i>"Breaking down and removing"</i> walls, etc implies that the wall is to be taken down to the extent shown on the drawings or as may be described and that all necessary shoring is to be provided and allowed for to ensure the safety of the building during the pulling down or until new walls are erected and all portions of the remaining walls where disturbed or affected by the removal are to be made good and left ready for the plaster or other finishings</p> <p><i>"Taking out and removing doors, windows, etc"</i> implies that the door, etc is to be carefully taken down together with the frame, linings, architraves, window sills, etc complete and where brick lintels occur, it must be supported and propped until the openings are built up or new doors or windows built in position</p> <p>Carried to Collection Bill No. 1 ALTERATIONS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

Item No		Quantity	Rate	Amount R
	<p>"Making good" implies that all necessary repairs are to be made to reinstate articles that may be damaged through the removal or otherwise, and the supplying of any new materials to match existing work, and is to include any necessary repairs to adjacent finishings such as floors, skirtings, plaster, painting, etc and such making good is to match adjoining work in all respects and in all trades</p> <p>GENERAL</p> <p><u>Protection from damage</u></p> <p>1 All floors, doors, windows, fittings, ceilings, roofs, etc not to be removed and become the property of the Contractor shall be adequately protected from damage during the progress of the works and any damage resulting from the repairs, renovations, alterations or demolitions shall be made good by the Contractor at his own expense</p> <p><u>Temporary barriers, screens, etc including removal</u></p> <p>2 Security and safety warning tapes and signage to enclose the Works where necessary</p> <p>3 Any temporary tarpaulins, dust and weatherproof screens and barriers that may be necessary for protection of the Works</p> <p><u>Watering the Works</u></p> <p>4 Wherever and whenever necessary, or when directed by the Representative/Agent, the Works shall be well watered with a jet or spray from a hose sufficient to prevent any nuisance from dust</p> <p><u>REMOVAL OF EXISTING WORK</u></p> <p><u>Breaking up and removing mass concrete</u></p> <p>5 Steps m3 1</p> <p><u>Breaking up and removing reinforced concrete including cutting off and removing reinforcement and cart away to a dumping site to be located by the contractor</u></p> <p>6 150mm Thick concrete m2 1 840</p> <p>7 175mm Thick concrete m2 718</p> <p>Carried to Collection</p> <p>Bill No. 1</p> <p>ALTERATIONS</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

D134

Item No			Quantity	Rate	Amount R
8	200mm Thick slab	m2	321		
	<u>Breaking down and removing brickwork etc</u>				
9	Half brick walls	m2	84		
10	One brick walls	m2	1 539		
	<u>Carefully taking out and setting aside for re-use, canopies comprising steel rafters, purlins and corrugated iron roof sheets</u>				
11	6000mm Long x 4000mm Wide, fixed to walls at an approximate height of 6000mm above natural ground level	No	5		
	<u>Taking out and removing doors, windows, etc form brickwork to be demolished</u>				
12	Timber door size 0.95 x 2.06m high	No	29		
13	Aluminium window size 4.5 x 2.06m high	No	1		
14	Steel Strong room door size 900 x 2100mm high	No	1		
	<u>Taking out and removing doors, windows, etc including thresholds, sills, etc (building up openings elsewhere)</u>				
15	Timber window and frame size 1500 x 1000mm high	No	48		
16	Steel roller shutter door 6500 x 420mm high	No	5		
17	Steel roller shutter door 7600 x 420mm high	No	1		
	<u>Taking out and removing fittings, etc</u>				
18	2800 x 3200mm Wide dock leveller	No	2		
19	Extractor fan size 400 x 400mm high	No	6		
20	Light fittings fixed to the external walls at approximately 7000mm height	No	24		
21	Light fittings fixed to the underside of roof internally with and including hanging steel steel supports	No	50		
22	Steel cable trays fixed to walls at approximately 7000mm high	m	373		
	Carried to Collection				
	Bill No. 1				
	ALTERATIONS				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				
				R	

D134

Item No		Quantity	Rate	Amount R
23	Take out and remove steel burglar guards size approximately 1500 x 2500mm high fixed to brickwork including making good brickwork	No 50		
	<u>Disconnect and take off rainwater goods, flashings, etc</u>			
24	Carefully take out remove fibre cement eaves box gutter	m 373		
25	Carefully take out remove fibre cement downpipes including eaves offset, shoes, brackets etc	m 126		
26	Carefully take out and remove existing fibre cement fascias	m 373		
	<u>Taking out and removing joinery fittings etc</u>			
27	Floor mounted kitchen cupboard approximately size 2000 x 900mm high	No 1		
28	Timber ceilings, etc	m2 744		
29	3000 x 1500mm High pinning boards	No 4		
	<u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>			
30	Steel pipe not exceeding 110mm diameter fixed to walls at approximatel 7000mm height including making good holes, etc	m 149		
31	Steel pipe not exceeding 160mm diameter fixed to walls at approximatel 7000mm height including making good holes, etc	m 45		
32	Vitreous china WC pan with cistern	No 4		
33	Vitreous china Wash hand basins including mounting brackets and or pedestals	No 4		
	<u>Relocation of existing trusses, purlins, etcetera to new positions</u>			
34	Unbolt, and set aside existing steel purlins, bracing, etc for re-use as directed by the Principal Agent, lift existing trusses from current position, and place at new position approximately 3000mm away from current position, and refix purlins, etc into this new position to the Engineer's approval	Item		
	Carried to Collection		R	
	Bill No. 1			
	ALTERATIONS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>OPENINGS</u>			
	<u>Carefully cutting through one brickwall to form openings, including making good reveals</u>			
35	Opening size 1900mm wide x 4500mm high to receive polycarbonate sheets (sheets elsewhere measured) No	19		
36	Opening size 3500mm wide x 3500mm high to receive roller shutter doors (roller shutter doors elsewhere measured) No	4		
37	Opening size 1000mm wide x 1000mm high to receive window (window elsewhere measured) No	6		
38	Opening size 1000mm wide x 1500mm high to receive window (window elsewhere measured) No	39		
39	Opening size 12500mm wide x 2200mm high to receive door (door elsewhere measured) No	1		
40	Opening size 13000mm wide x 2200mm high to receive door (door elsewhere measured) No	1		
	<u>MAKING GOOD OF FINISHES ETC</u>			
	<u>Make good face brick walls with "Spirit of Salts" or similar approved facebrick cleaning compound</u>			
41	Clean down facebrick surfaces with spirits of salts or similar approved cleaning detergent by cleaning specialist m2	2 050		
	<u>CREDIT FOR MATERIALS FROM DEMOLITIONS</u>			
42	Less : Credit for value received on materials from demolitions	Item		
	Carried to Collection		R	
	Bill No. 1			
	ALTERATIONS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Bill No. 1

ALTERATIONS

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

94

95

96

97

98

99

100

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 1

ALTERATIONS

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No	Quantity	Rate	Amount R
BILL NO 2 EARTHWORKS (PROVISIONAL) The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained SUPPLEMENTARY PREAMBLES <u>Nature of ground</u> A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured <u>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 multiple handling of material <u>Approval of foundation excavations by the Engineer</u> Foundation excavations to be inspected and approved by the Engineer before any blinding is cast EXCAVATION, FILLING, ETC <u>Excavation in earth not exceeding 2m deep</u>			
1	Trenches	m3	357
2	Holes	m3	663
Carried to Collection Bill No. 2 EARTHWORKS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			R

D134

Item No		Quantity	Rate	Amount R
	<u>Back excavation of vertical sides of excavation in earth for working space including backfilling compacted to 98% Mod AASHTO density</u>			
3	Not exceeding 500mm deep for placing and removing formwork to bases, strip footings, etc against excavated face.	m2	413	
4	Exceeding 500mm and not exceeding 1500mm deep for placing and removing formwork to bases, strip footings etc against excavated face.	m2	2 001	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1 211	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	2 688	
	<u>Keeping excavations free of water</u>			
7	Keeping excavations free of all water other than subterranean water		Item	
	<u>Earth filling of river sand supplied by the contractor</u>			
8	50mm Thick under floors	m2	133	
	<u>Earth filling of G5 material supplied by the contractor and compacted to 98% MOD AASHTO density in 150mm thick layers</u>			
9	Under floors etc	m3	606	
	<u>Earth filling of G2 material supplied by the contractor and compacted to 98% MOD AASHTO density in 150mm thick layers</u>			
10	Under floors etc	m3	283	
	<u>Compaction of surfaces</u>			
11	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 98% Mod AASHTO density	m2	3 253	
	Carried to Collection			
	Bill No. 2			
	EARTHWORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

[illegible]

Bill No. 2

EARTHWORKS

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

102

103

104

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 2

EARTHWORKS

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Cost of tests</p> <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 and to the approval of the architect. (Test cubes are measured separately)</p> <p>Formwork</p> <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. 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>			
	<p>Carried to Collection</p> <p>Bill No. 3</p> <p>CONCRETE, FORMWORK AND REINFORCEMENT</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	Formwork to soffits of (solid) slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described			
	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"			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>10MPa/19mm concrete</u>			
1	Surface blinding under footings and bases	m3	30	
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
2	Bases	m3	204	
3	Strip footings	m3	77	
4	Ground beams	m3	68	
	<u>REINFORCED CONCRETE</u>			
	<u>25MPa/19mm concrete</u>			
5	Surface beds on top of existing concrete	m3	689	
6	Surface beds on waterproofing	m3	661	
	<u>30MPa/19mm concrete</u>			
7	Columns in foundations	m3	39	
8	Columns	m3	16	
9	Slabs, including beams and inverted beams	m3	269	
10	Isolated beams	m3	7	
	Carried to Collection			
	Bill No. 3			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>TEST CUBES</u>			
11	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional) Sets	793		
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a power float</u>			
12	Surface beds, slabs, etc m2	6 659		
	<u>Stripping back head of concrete pile for a height not exceeding 500mm to expose reinforcement including trimming to defined level and bending reinforcement as necessary for casting into pile cap</u>			
13	300mm Diameter pile No	160		
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY 11)</u>			
	<u>Rough formwork to sides</u>			
14	Bases m2	404		
15	Ground beams m2	329		
16	Rectangular columns with total height exceeding 1,5m but not exceeding 3,5m above bearing level m2	188		
17	Rough formwork to footings m2	167		
	<u>Rough formwork to sides and soffits</u>			
18	Beams propped up exceeding 1.5m but not exceeding 3,5m high m2	458		
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>			
	<u>Smooth formwork to sides</u>			
19	Rectangular columns in foundations m2	269		
20	Formwork to edge of concrete panels exceeding 300mm high m2	344		
	Carried to Collection		R	
	Bill No. 3			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
	<u>Smooth formwork to soffits</u>			
21	Slabs propped up exceeding 1,50m but not exceeding 3,5m high	m2	879	
	<u>Smooth formwork to sides and soffits</u>			
22	Isolated beams	m2	64	
	<u>Boxing in smooth formwork to form</u>			
23	25 x 25mm Chamfer along top or bottom edge	m	312	
24	50 x 50mm Chamfer along top or bottom edge	m	156	
25	25 x 25mm Vertical chamfer at corner	m	1 327	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces:</u>			
26	10mm Joints not exceeding 300mm high.	m	230	
	<u>Saw cut joints</u>			
27	3 x 40mm Deep saw cut joints in top of concrete	m	230	
	<u>REINFORCEMENT (PROVISIONAL)</u>			
	<u>Mild and high tensile steel reinforcement to structural concrete work</u>			
28	Various diameter bars	t	175.40	
	<u>Fabric reinforcement</u>			
29	Type 245 fabric reinforcement in concrete surface beds, slabs, etc	m2	3 933	
30	Type 617 fabric reinforcement in concrete surface beds, slabs, etc	m2	2 725	
	Carried to Collection			
	Bill No. 3			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Bill No. 3

CONCRETE, FORMWORK AND REINFORCEMENT

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

106

107

108

109

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 3

CONCRETE, FORMWORK AND REINFORCEMENT

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 4</u></p> <p><u>PILING</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>INDEMNITY</u></p> <p>The contractor shall take full responsibility for piling work and shall guarantee that piling work will support the calculated loads laid down by the engineer without injurious settlement. The actual lengths of piles shall be determined on site by the contractor in consultation with the engineer who will give all assistance possible. This does not in any way relieve the contractor of his responsibility or obligation to provide the specified guarantee</p> <p>The contractor shall indemnify the employer against any injury to or death of any person and all loss or damage to all structures resulting from the failure of any pile. In the event of the failure of any pile, the contractor shall make good such pile and all consequent damages at his own expense.</p> <p>The contractor shall insure in a policy, approved by the Principal Agent, against risks arising out of the responsibilities, guarantee and indemnities specified. The contractor shall pay all premiums in respect of this insurance policy. The guarantee shall be unlimited and shall be effective for a period of 5 (Five) years from the date of completion of the contract.</p>			
	<p>Carried to Collection</p> <p>Bill No. 4</p> <p>PILING</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<p><u>SCOPE OF WORK</u></p> <p>The work comprises of the design and installation of 160 piles. The contractor is referred to drawing No 719 ST 007 Rev 00 annexed to these bills of quantities in order to acquaint himself fully with the nature and scope of the work</p> <p>Note : Piles are to to be installed internally within the existing warehouse building whose roof is at a height of 6m.</p> <p>Tenderers are to allow in their preliminaries for costs of any necessary hoardings, temporary enclosures, as may be deemed necessary to the approval of the engineers as no claims for extras from a failure to do so will be entertained at any later date.</p> <p><u>GUARANTEE AND INSURANCE</u></p>			
1	Provision of the specified piling guarantee and insurance	Item		
	<p><u>GENERAL</u></p> <p>The descriptions contained in these Bills of Quantities are to be read in conjunction with the drawings and specifications as prepared by DBI Consulting Engineers and model preambles and are intended as means of identifying the various facets of the work. Tenderers shall allow for all the costs in connection with the various items, taking full cognisance of the drawings, specifications, Bills of Quantities and site investigation.</p> <p><u>ESTABLISHMENT</u></p>			
2	Transporting and establishment on site of necessary plant for the execution of the work and removal thereof on completion	Item		
3	Setting out of piles	No	160	
4	Setting up plant at pile position	No	160	
	<p>Carried to Collection</p> <p>Bill No. 4</p> <p>PILING</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

[illegible]

Bill No. 4

PILING

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

111

112

113

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 4

PILING

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 5</u></p> <p><u>MASONRY</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls and brickwork in two skins shall be deemed to include wall ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p>Wall ties shall be polypropylene "Permaties" complying with SABS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other.</p> <p>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 "Brixéal" bitumen emulsion waterproofing coating.</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	<p>Carried to Collection</p> <p>Bill No. 5</p> <p>MASONRY</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<u>FOUNDATIONS</u>			
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
1	230mm Thick brick walls	m2	233	
2	460mm Brick wall of two 230mm brick skins including wire ties, etc	m2	5	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brickwork reinforcement in foundations</u>			
3	75mm Wide reinforcement built in horizontally	m	418	
4	150mm Wide reinforcement built in horizontally	m	708	
	<u>SUPERSTRUCTURE</u>			
	<u>Brickwork of "Corobrik NFP" or similar approved bricks in class II mortar:</u>			
5	Half brick walls	m2	162	
6	Half brick walls in beam filling	m2	74	
7	Half brick walls in screen walls	m2	22	
8	One brick walls	m2	1 667	
9	345mm Hollow walls of two half brick skins including wire ties	m2	21	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints</u>			
10	10mm "SikaFlex 35SL" or similar approved softboard built in vertically between concrete surfaces including 10 x 10mm polyethelene backing bond breaker	m2	406	
	<u>Brickwork reinforcement</u>			
11	75mm Wide reinforcement built in horizontally	m	58	
12	150mm Wide reinforcement built in horizontally	m	4 043	
	Carried to Collection			
	Bill No. 5			
	MASONRY			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No			Quantity	Rate	Amount R
	<u>Concrete prestressed fabricated lintels</u>				
13	110 x 75mm Lintels in lengths not exceeding 3m	m	72		
14	110 x 75mm Lintels in lengths exceeding 3m	m	49		
	<u>Turning pieces</u>				
15	230mm Wide turning piece to lintels etc	m	3		
	<u>Air bricks etc</u>				
16	229 x 152mm Clay vermin proof air brick	No	18		
	<u>White plastic air vent</u>				
17	White plastic air vent size 235 x 157mm fixed to wall with white cement mortar	No	18		
	<u>Galvanised hoop iron cramps, ties, etc</u>				
18	30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork	No	35		
19	"Dalclamp FT200HR" wall tie 20mm long with one end shot pinned to concrete or brickwork and the other end built into brickwork	No	2 272		
	Carried to Collection				
	Bill No. 5				
	MASONRY				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				
				R	

[illegible]

Item No		Quantity	Rate	Amount R
	BILL NO 6			
	WATERPROOFING			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	SUPPLEMENTARY PREAMBLES			
	Waterproofing			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	DAMPPROOFING OF WALLS AND FLOORS			
	<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or similar approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
1	Under surface beds	m2	3 671	
	JOINT SEALANTS ETC			
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
2	20 x 10mm In vertical expansion joints including raking out expansion joint filler as necessary	m	363	
	<u>"Sondor Jointex" or similar approved closed cell, expanded polyethelene joint forming material</u>			
3	10 x 75mm In vertical expansion joints including raking out expansion joint filler as necessary	m	918	
	TOTAL CARRIED TO FINAL SUMMARY			
	Bill No. 6			
	WATERPROOFING			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Item No		Quantity	Rate	Amount R
	BILL NO. 7			
	ROOF COVERINGS			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	PROFILED METAL SHEETING AND ACCESSORIES			
	<u>Global Roofing Solutions 0,53mm thick 700mm cover Klip-Tite™ profile Clean COLORBOND™ - Ultra steel AZ200 spelter G550 Colorplus finish top coat and backing coat roof sheeting, fixed to steel intermediate purlins at 2300mm centres and eaves and ridge purlins at 1900mm centres using KL700 clips fixed with 10No.16 x 16mm long self drilling wafer head PH2 screws, No. 3 drill point fasteners, all in accordance with the manufacturer's specifications.</u>			
1	Roof covering with pitch not exceeding 15 degrees	m2	8 171	
2	Roof covering to a mono pitch not exceeding 7,5 degrees	m2	132	
3	1.25mm Nu-Rib polycarbonate clear sheets fastened to supports through each crown of the profile using Class 4 primary fixings and side stitched to adjacent sheeting not exceeding 500mm	m2	325	
	<u>"Global Roofing Solutions Nu-Rib 762" or similar approved vertical Cladding to roofs.</u>			
4	0,55mm thick 762mm cover Nu-Rib profile ZINCAL® AZ150 spelter G550 vertical cladding, fixed to steel intermediate rails at 2350mm centres and end rails at 1950mm centres using Hex Flange Head + EPDM Seal self drilling No. 3 drill point, No. 12-14 x 25mm long fasteners. Rail fixed to first, third and fifth crest of each sheet and at all crests at sheet ends, all in accordance with the manufacturer's specifications.	m2	207	
	<u>Metal Roof Flashings, etc</u>			
5	Ridge cap Ref FB3, with 550mm girth	m	187	
6	Barge cap Ref FB13, with 550mm girth	m	334	
	Carried to Collection		R	
	Bill No. 7			
	ROOF COVERINGS, ETC			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
7	Headwall flash Ref SB, with 308mm girth <u>"Sondor" or similar approved polyclosers to eaves and verges</u>	m	241	
8	Polyclosers suitable for eaves with 0.53mm Klip-tite metal roof sheeting <u>ROOF AND WALL INSULATION</u> <u>Sisalation® FR 430 Fire retardant industrial grade reinforced aluminium foil insulation double sided, durable, reflective foil laminate incorporating a fire retardant between the various substrates, bonded together with low density polyethene, tested for conformance with SANS 1381-4:2009, with a Class 1 fire rating in accordance with SANS 10177 - 3:2005 and ASTM E84 and BS 476 part 5, 6 and 7, with purlins spaced at greater than 1500mm centres with 1,6mmØ double galvanised straining wires at 275mm centres securely fixed across top of purlins, Sisalation roll cut to size and suspended between the purlins and pulled between wires and roof sheets by attached pull wire. Sisalation folded over first and last span wires and securely stapled to itself, all as per the manufacturer's instructions.</u>	m	764	
9	Insulation laid taut over rafters and fixed concurrent with roof covering including galvanised steel straining wires <u>Sisalation® 405 Multi-purpose grade reinforced aluminium foil insulation double sided, light grammage, durable, reflective foil laminate incorporating layers of aluminium foil, high strength Kraft paper and reinforcing scrim bonded together with low density polyethylene, tested for conformance with SANS 1381-4:2009, with a Class 1 fire rating in accordance with SANS 10177 - 3:2005 and BS 476 part 5, 6 and 7, with purlins spaced at less than 1500mm centres drawn tautly across rafters with purlins spaced at less than 1500mm centres and secured to each rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll.</u>	m2	8 039	
10	Insulation laid taut over rafters and fixed concurrent with roof covering including galvanised steel straining wires <u>Carried to Collection</u> Bill No. 7 ROOF COVERINGS, ETC THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN	m2	106	
			R	

Bill No. 7

ROOF COVERINGS, ETC

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

120

121

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 7

ROOF COVERINGS, ETC

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 8</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Joinery</p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p>Fixing</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p>Decorative laminate finish</p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS ETC</u></p> <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof construction</p> <p>Trusses are at maximum 1100mm centres. Roof covering is Klip-Tite Zinalume AZ200 on timber purlins. Ceilings are 6.4mm skimmed gypsum plasterboard ceiling on 38 x 38mm brading.</p>			
	<p>Carried to Collection</p> <p>Bill No. 8</p> <p>CARPENTRY AND JOINERY</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<p>All trusses, beams, rafters, timber posts, bracing and roofing members, etc to be supplied and fixed in accordance with the Engineer's design.</p> <p>The pitch of the roof should be 7.5 degrees. Roof overhang should be as indicated on the drawings. The material and design of the roof construction must be in accordance with the relevant edition of the South African Bureau of Standards and the Standard Building Regulations Chapter 3, Loads and Forces, and Chapter 7, Structural Timber. The minimum requirement for all timber shall be stress graded in accordance with SABS 563. Design stresses shall be as recommended by the National Timber Research Institute - CSIR. All joints of structural importance in rafters and trusses should be bolted down according to Engineer's details. Prices shall include for all necessary fixings.</p> <p><u>Timber Roof Construction</u></p> <p>1 Mono pitch roof, approximately 13000mm long x 7000mm wide on plan including all rafters, purlins, jack rafters, etc all as shown on Drawing No WD 220 Revision A - Diesel Storage and Bin Area</p> <p>2 Mono pitch roof, approximately 7000mm long x 5500mm wide on plan including all rafters, purlins, jack rafters, etc all as shown on Drawing No WD 220 Revision A - Guard House</p> <p><u>EAVES, VERGES, ETC</u></p> <p><u>Everite Nutec medium density fibre-cement</u></p> <p>3 10 x 225mm Fascia boards including Everite chroma-prep H-profile jointing strips</p> <p><u>DOORS, ETC</u></p> <p><u>Medium Duty (SABS 545) hollow core timber doors with masonite honeycomb finish and lockset slot</u></p> <p>4 Single door size 813 x 2032mm high hung to steel door frame (door frame elsewhere measured), D1</p> <p>5 Single door size 762 x 2032mm high hung to steel jambs (steel jambs elsewhere measured (D6)</p> <p>Carried to Collection Bill No. 8 CARPENTRY AND JOINERY THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
		Item		
		Item		
		m	65	
		No	11	
		No	6	
			R	

D134

Item No		Quantity	Rate	Amount R
	<u>Medium Duty (SABS 545) semi-solid core timber doors with masonite honeycomb finish and lockset slot</u>			
6	Single door size 813 x 2032mm high hung to steel door frame (door frame elsewhere measured), D2 No	2		
7	Single door size 945 x 2032mm high hung to steel door frame (door frame elsewhere measured), D3 No	1		
8	Single door size 1800 x 2032mm high hung to steel door frame (door frame elsewhere measured), D12 No	2		
	<u>"Bitcon Industries" or similar approved semi-solid flush panel masonite finished fire door with lock slot hung to steel door frame (door frame elsewhere measured) including ironmongery as recommended by the supplier</u>			
9	Class B, Door size 900 x 2032mm high, D4 No	2		
10	Class A, Door size 900 x 2032mm high, D7 No	2		
	<u>JOINERY FITTINGS</u>			
	<u>Goods Receiving Operations Manager Office Counter and or Cupboard</u>			
11	8525mm Long overall x 600mm wide x 900mm high overall L-shaped floor and wall mounted counter and cupboard comprising 32mm "Bison Dura" or similar approved water resistant particle board with bullnosed edge, laminated with 1mm thick "Formica" or similar approved high pressure laminate HG and post formed in storm grey (423), with a reverse side "Formica HPL-BK" or similar approved brown backer, with exposed edges covered with matching edging, worktop fixed to walls with timber supports over cupboard, cupboard carcass to comprise 16mm thick "Bison Melawood" or similar approved with exposed edges to receive matching edging, cupboard door to be 765mm x 556mm x 16mm thick with edging to all sides fixed to carcass with 3 dimensionally adjustable, 165 degrees opening overlay type "Grass Twistlock 4000 series" or similar approved hinges, two per door, shelf to be 600mm deep x 16mm thick, supported on "Grass M41" or similar approved nylon brackets with exposed edges to receive matching edging, skirting to be 75mm high x 16mm thick timber support to base with exposed edges to receive matching edging, all to be strictly as detailed in Drawing Number WD 700 annexed to these Bills of Quantities No	1		
	Carried to Collection		R	
	Bill No. 8			
	CARPENTRY AND JOINERY			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
	<u>Security Office Counter</u>			
12	4770mm Long overall x 600mm wide x 900mm high overall L-shaped wall mounted counter comprising 32mm "Bison Dura" or similar approved water resistant particle board with bullnosed edge, laminated with 1mm thick "Formica" or similar approved high pressure laminate HG and post formed in storm grey (423), with a reverse side "Formica HPL-BK" or similar approved brown backer, with exposed edges covered with matching edging, worktop fixed to walls with supports, all to be strictly as detailed in Drawing Number WD 700 and WD 220 annexed to these Bills of Quantities	No 1		
	<u>Bathroom Vanities</u>			
13	Approximately 1200mm Long x 600mm wide x 488mm high overall, bathroom vanity comprising 32mm thick x 600mm wide Grade A "Rustenburg Black" or similar approved granite top with a bullnosed front edge, 32 x 300mm high vertical cover with a bullnosed and polished exposed bottom edge, and 32 x 188mm high splashback including cutting two holes for wash hand basin (washhand basin elsewhere measured), all fixed to walls with steel bracked as detailed in Drawing Number WD 700 and annexed to these Bills of Quantities	No 1		
	Carried to Collection			
	Bill No. 8			
	CARPENTRY AND JOINERY			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Bill No. 8

CARPENTRY AND JOINERY

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

123

124

125

126

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 8

CARPENTRY AND JOINERY

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	BILL NO 9			
	<u>CEILINGS PARTITIONS AND ACCESS FLOORING</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>SUSPENDED CEILINGS:</u>			
	Electric light fittings, diffusers, panels, etc., generally are 'lay-in' units of the same dimensions as the suspension grid described and allowance must be made 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>600 x 1200 x 15mm Thick "Owacoustic Future 60 Green Premium Mineral Wool" or similar approved ceiling tiles on exposed pre-painted tee suspension system, including main and cross tees, necessary galvanised steel hangers at centres not exceeding 1200mm, grids, sub grids etc.:</u>			
1	Ceilings suspended not exceeding 4m below concrete soffits	m2	230	
	<u>Cornices to suspended ceilings:</u>			
2	"Donn SM25 Shadowline" cornices plugged.	m	167	
	<u>FLUSH PLASTERED CEILINGS</u>			
	<u>6,4mm "Rhino" or similar approved gypsum plasterboard with galvanised H-type pressed steel jointing strips</u>			
3	6,4mm Plasterboard ceilings fixed to 38 x 38mm timber battens	m2	72	
	<u>9mm Thick x 300mm Wide x 600mm deep "Rhino" gypsum plasterboard with 63mm wide strips of mesh scrim nailed over joints and the whole finished with gypsum skim plaster trowelled to a smooth polished surface on patent concealed suspension system:</u>			
4	L-shaped bulkhead including all necessary additional supportwork.	m	36	
	Carried to Collection			
	Bill No. 9			
	CEILINGS PARTITIONS AND ACCESS FLOORING			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>Gypsum plasterboard cornices</u>			
5	120 x 120mm Polyurethane moulded cornices	m	62	
Carried to Collection Bill No. 9 CEILINGS PARTITIONS AND ACCESS FLOORING THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				R

Bill No. 9

CEILINGS PARTITIONS AND ACCESS FLOORING

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

128

129

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 9

CEILINGS PARTITIONS AND ACCESS FLOORING
THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN

R

Item No	Quantity	Rate	Amount R
BILL NO 10			
<u>FLOOR COVERINGS</u>			
The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
<u>FLOOR COVERINGS</u>			
<u>SPECIFIC PREAMBLES TO AREAS WITH FLOWCRETE PRODUCTS</u>			
Synthetic resin overlays are not installed to upgrade sub-standard bases, but rather to enhance and protect the virtues of well designed ones			
<p>The thickness and cost of resin mortar flooring is such that it is not practical to use the flooring system to correct the levels of a substrate that is out of tolerance. For this reason, the substrate must be laid to the same tolerances as required for the finished resin mortar flooring</p> <p>It is important that the new concrete floor complies with the following details:</p> <p>a) The minimum quality to be Grade II as per SABS 1200 G specification. This is a maximum permissible deviation from flatness of 5mm under a 3m straight edge supported at both ends on blocks of equal thickness. Abrupt departures from a plane flat surface such as ridges, grooves, steps are not acceptable</p> <p>b) It must withstand the dynamic and static loads to which it will be subjected.</p> <p>c) A suitable water tight membrane must be installed to contain rising water.</p> <p><u>Where no damp proof membranes are present - Flowcem DPM must be installed prior to any installations of Floors taking place.</u></p> <p>All necessary joints, crack inducer saw cuts, edge / border strips or profiles are to be provided in the base.</p> <p>All slopes, hips, valleys are to be included in the base</p>			
Carried to Collection			
Bill No. 10			
FLOOR COVERINGS			
THE NEW PIER STATE WAREHOUSE FOR SARS			
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<p>construction and to ensure free run off of liquids. A minimum fall of 1:60 is advised.</p> <p>d) The base is to be a minimum of 28 days old. After curing the residual moisture content in the base shall not exceed 4% when measured on an acceptable electronic moisture metre.</p> <p>The minimum strength requirements to be: Compressive 20N/mm² / Tensile Strength 2.0N/mm²</p> <p>Granolithic screeds are to be well bonded, with a minimum thickness of 30mm.</p> <p>The base is to be finished level and smooth with a single pass steel trowel finish, but not polished</p> <p>Floor hardener finishings, cement powder finishings, curing membranes, silicones or oil must not be present in the base</p> <p><u>"Flowcrete Flowshield 2000" or similar approved 2mm thick self levelling epoxy flooring on screeded concrete floors</u></p>			
1	<p>Scarify and sweep clean new screed, cut anchor grooves at floor/wall junctions and drains at 8 x 8mm, prime entire area using Flowprime at 4m² per litre, install vertical skirting at 150mm and coved radius at 35mm using Flowcrete F1 coving mortar, apply 2mm thick Flowshield 2000, once cured, the movement joints must be re-cut to original geometry and filled with Flowtex HM flexible joint sealant, all in strict accordance with manufacturer's instructions.</p>	m2	702	
	<p>Carried to Collection Bill No. 10 FLOOR COVERINGS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<u>"Flowcrete Flowshield 2000" or similar approved 2mm thick self levelling epoxy flooring and CR Sealer on screeded concrete floors</u>			
2	Scarify and sweep clean new screed, cut anchor grooves at floor/wall junctions and drains at 8 x 8mm, prime entire area using Flowprime at 4m2 per litre, install vertical skirting at 150mm and coved radius at 35mm using Flowcrete F1 coving mortar, apply 2mm thick Flowshield 2000, finish entire floor with 2 coats of CR Sealer coat matt coating at 8m2 per litre, all in strict accordance with manufacturer's instructions. Once cured, the movement joints must be re-cut to original geometry and filled with Flowtex HM flexible joint sealant	m2	5 766	
	<u>"Flowcrete Deckshield ID" or similar approved epoxy flooring on screeded concrete floors</u>			
3	Vacuum blast floor to attain suitable key and condition, and vacuum thoroughly to remove all shot, prime the entire area with Deckshield LXP Primer at 0.7 kilograms per litre and dress up verticals to desired height, then scatter silica quartz (0.3-0.65mm aggregate) at 1.5 kilograms per m2 and allow to cure, dust off all excess aggregate and sweep clean, apply Deckshield Finish at 0.6 kilograms per m2 and allow to cure, finish system with one coat Deckshield UV at 10m2 per litre and allow to cure, all to be in strict accordance to manufacturer's instructions	m2	95	
	<u>"Flowcrete Flowtex CR" or similar approved heavy duty slip resistant epoxy flooring on screeded concrete floors</u>			
4	Vacuum blast screed to ensure correct profile for installation and vacuum clean, seal substrate and coved skirting using Flowprime solvent free resin at 4m2 per litre and allow curing, install vertical skirting at 150mm with coved radius at 35mm, apply heavy duty slip resistant Flowtex CR at 6mm and allow curing, all applied in accordance with manufacturer's instructions	m2	201	
Carried to Collection Bill No. 10 FLOOR COVERINGS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				R

Item No		Quantity	Rate	Amount R
	<u>"Flowcrete Peran PTS" or similar approved heavy duty slip and chemical resistant epoxy flooring on screeded concrete floors</u>			
5	Vacuum blast screed to ensure correct profile for installation and vacuum clean, seal substrate and coved skirting using Flowprime solvent free resin at 4m ² per litre and allow curing, install vertical skirting at 150mm with coved radius at 35mm, scatter B&E, 1.1mm at 1 kilogram per m ² , apply STB slurry at 1.6 litres per m ² , as per method statement, scatter natural quartz at 4.5 kilograms per m ² into STB Slurry coat, power float area to achieve uniform finish and allow curing, apply heavy duty slip and chemical resistant CR Coat at 0.5m ² per litre and allow curing, all applied in accordance with manufacturer's instructions	m2	181	
	<u>Antistatic floor tiles</u>			
6	FloorworX FloorworX SD fully flexible heavy duty vinyl floor tiles 608 x 608 x 2,0mm thick in Ivory finish (Colour code: FSD0030), manufactured in accordance with EN 649, laid in FloorworX No. 27 antistatic/conductive adhesive spread with a Vicker A24F trowel at a rate of between 3.0m ² and 3.5m ² per litre on suitably prepared subfloor (elsewhere specified) with a hygrometer reading showing a moisture content of less than 70% and rolled with 68kg three section metal roller on completion.	m2	8	
	<u>Carpet tiles</u>			
	<u>500 x 500mm Belgotex or similar approved carpet tiles laid on adhesive (Provide a PC amount of R300/m² for tiles and adhesive including delivery to site?)</u>			
7	On screeded floors (screed elsewhere measured)	m2	545	
	<u>Skirtings</u>			
8	20 x 138mm High stained merant skirting plugged	m	32	
	Carried to Collection			
	Bill No. 10			
	FLOOR COVERINGS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Bill No. 10			
FLOOR COVERINGS			
<u>COLLECTION PAGE</u>			
Total Brought Forward from Page No.	Page No	Amount R	
	131		
Total Brought Forward from Page No.	132		
Total Brought Forward from Page No.	133		
Total Brought Forward from Page No.	134		
TOTAL CARRIED TO FINAL SUMMARY		R	
Bill No. 10			
FLOOR COVERINGS			
THE NEW PIER STATE WAREHOUSE FOR SARS			
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>BILL NO 11</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>Finishes to ironmongery</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 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>HINGES, BOLTS, ETC</u>			
	<u>LOCKS</u>			
	The following locks are to be suitable for master key operation			
1	Dorma D036S or similar approved multi-lever sash lock	No	15	
2	Dorma D036S or similar approved Euro-profile or similar approved sash lock	No	6	
3	Dorma DDC056501, 65mm or similar approved Euro-profile double cylinder lock	No	2	
4	Ironware Calini 1904-24SS screw type rose or similar approved escutcheon	No	23	
5	Ironware B02 or similar approved indicator bolt	No	6	
	Carried to Collection			
	Bill No. 11			
	IRONMONGERY			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No			Quantity	Rate	Amount R
6	Ironware 2031 or similar approved dead lock	No	1		
7	Dorma D039R or similar approved lockset with rebated meeting stiles comprising dust excluding socket 4023 and 150mm flush lever bolt	No	4		
	<u>HANDLES</u>				
	<u>'Ironware or similar approved'</u>				
8	Calini 1019 brushed stainless steel through fix level handle	No	42		
9	Code 1926, Brushed stainless steel indicator handle	No	1		
	<u>LETTERS, NAMEPLATES, ETC</u>				
10	Ironware IP01 or similar approved male ablution sign	No	2		
11	Ironware IP02 or similar approved female ablution sign	No	1		
12	945 x 200 x 2mm Thick brushed stainless steel kick plates	No	2		
	<u>DOOR CLOSERS</u>				
13	Ironware DC01 or similar approved door closer	No	12		
14	Geze TS 4000G DA EN1-6 delayed action slide channel silver door closer	No	1		
	<u>BATHROOM FITTINGS</u>				
	<u>"Franke"</u>				
15	"Franke STRX67" stainless steel lockable toilet roll holder fixed to wall as per manufactures' instructions	No	15		
	<u>"Servest Hygiene"</u>				
16	"Solar TH Dis-Stain-081" similar and equal approved stainless steel soap dispenser or fixed to brickwork or concrete	No	11		
	<u>"Bradleycorp" or similar approved stainless steel shower curtain rails with concealed fixing mechanism to walls</u>				
17	900mm Long curtain rail	No	2		
	Carried to Collection				
	Bill No. 11				
	IRONMONGERY				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				
				R	

D134

[illegible]

Bill No. 11 IRONMONGERY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	136	
Total Brought Forward from Page No.	137	
Total Brought Forward from Page No.	138	
TOTAL CARRIED TO FINAL SUMMARY		R
Bill No. 11 IRONMONGERY THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN		

Item No		Quantity	Rate	Amount R
	BILL NO 12			
	STRUCTURAL STEELWORK			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	3.1.1 Grades of steel			
	The grade of mild steel shall be Grade 300 W complying with SANS 1431.			
	5.1.2 Contractor provides shop details.			
	The Contractor shall be responsible for the preparation of all shop detail drawings.			
	5.3.9 Protective treatment to Structural steelwork			
	Structural steelwork shall be cleaned and prepared by wire brushing in accordance with SANS 10064 and all surfaces shall be primed as specified to a minimum dry film thickness of 30 micrometres before leaving the workshop. Upon delivery to the site and again after erection all bared surfaces shall be made good with similar primer			
	STEEL TRUSSES, COLUMNS, ETC			
	<u>The following in welded columns, roof trusses of angle section rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to steel</u>			
1	305 x 305 x 97mm Universal beam columns, 96.9 Kg/m bolted to stub columns (anchor bolts elsewhere), including drilling through for and including 2 x M12 bolts tying together the new column to an existing one, at 400mm centres including fixing plates, etc	t	52.67	
2	305 x 305 x 97mm Universal beam columns, 96.9 Kg/m bolted to top of existing columns including fixing plates, bolts, etc	t	10.28	
	<u>Hot dipped galvanised steel bolts of Grade 5.8 to trusses, steel columns, etc (Normal bolts deemed to be included in truss members' descriptions)</u>			
3	20mm Diameter x 1300mm long U-shaped anchor bolt cast into concrete, with nut and washer ends protruding by about 100mm to receive steel column (elsewhere measured)	No	128	
	Carried to Collection			
	Bill No. 12			
	STRUCTURAL STEELWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
	SUNDRY STEELWORK			
4	80 x 80 x 6mm Thick angle section column corner protector 1500mm long with two times R10 bar reinforcement 300mm long at 300mm centres, one end perpendicularly welded to the angle section and the other cast into concrete column	No	116	
	Carried to Collection Bill No. 12 STRUCTURAL STEELWORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN		R	

Bill No. 12

STRUCTURAL STEELWORK

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

140

141

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 12

STRUCTURAL STEELWORK

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	BILL NO 13			
	<u>METALWORK</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>SUNDRY STEELWORK</u>			
	<u>GALVANIZED MILD STEEL FENCING, GATES, BALUSTRADES, ETC.</u>			
	<u>Galvanized mild steel mesh fencing</u>			
1	Matt black finished 6500mm high mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres embedded into and including 400 x 400 x 650mm deep concrete base complete with excavations, filling, etcetera, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2050mm centres and to top of fence infill panels, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apertures.	m	313	
2	Matt black finished 4000mm high mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres embedded into and including 400 x 400 x 650mm deep concrete base complete with excavations, filling, etcetera, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres and to top of infill panels, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apertures.	m	199	
	Carried to Collection		R	
	Bill No. 13			
	METALWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
3	Matt black finished 24000 wide x 73000mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 6500mm height.	No	1	
4	Matt black finished 24000 wide x 62000mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 6500mm height.	No	1	
5	Matt black finished 7650mm wide x 24000mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 6500mm height.	No	1	
6	Matt black finished 9000 wide x 54000mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 4000mm height.	No	1	
Carried to Collection Bill No. 13 METALWORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				R

D134

Item No		Quantity	Rate	Amount R
7	Matt black finished 9000 wide x 46000mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 4000mm height.	No	1	
8	Matt black finished 9000 wide x 15400mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 4000mm height.	No	1	
9	Matt black finished 9000 wide x 7650mm long horizontal mesh fencing comprising 88.9mm diameter x 6mm thick circular hollow section posts at 2489mm centres, 88.9mm diameter x 6mm thick circular hollow section horizontal steel support fixed to steel posts at 2400mm centres, one diagonal bracing member at 4978mm centres, including infill panels comprising 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, fixed to top of vertical steel fencing at approximately 4000mm height.	No	1	
	<u>Galvanized mild steel gates, etc</u>			
10	Extra over matt black finished 6500mm high fence for 3000mm wide x 2400mm high sliding gate comprizing mild steel tubing frame size 100 x 100 x 6mm thick, filled with 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, including wheels, ironmongery and slidign track embedded into and including 300 x 150mm deep concrete, excavations, etc (G02)	No	6	
11	Extra over matt black finished 6500mm high fence for 3000mm wide x 2100mm high double gate comprizing mild steel tubing frame size 100 x 100 x 6mm thick, two equal leaves each size 1500 x 2100mm high filled with 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, including ironmongery, etc (G01)	No	3	
	Carried to Collection			
	Bill No. 13			
	METALWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

D134

Item No		Quantity	Rate	Amount R
12	Extra over matt black finished 6500mm high fence for 1800mm wide x 2100mm high double gate comprizing mild steel tubing frame size 100 x 100 x 6mm thick, two equal leaves each size 900 x 2100mm high filled with 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, including ironmongery, etc (G03)	No 6		
13	Extra over matt black finished 4000mm high fence for 3000mm wide x 2100mm high double gate comprizing mild steel tubing frame size 100 x 100 x 6mm thick, two equal leaves each size 1500 x 2100mm high filled with 3.2mm diameter vertical and horizontal wires forming 150 x 100mm apartures, including ironmongery, etc (G01)	No 11		
	<u>Galvanized mild steel balustrading with uprights set in epoxy non-shrink grout in pockets in concrete:</u>			
14	1100mm High galvanized mild steel balustrade comprising 50mm diameter handrail fixed to and including 1000mm high galvanised mold steel posts fixed to concrete floor at 1100mm centres, and 10mm mild steel horizontal intermediate rails at 100mm centres, all complete as per Drawing WD 620 Rev 0 annexed to these Bills of Quantities	m 106		
15	1100mm High galvanized mild steel raking balustrade comprising 50mm diameter handrail fixed to and including 1000mm high galvanised mold steel posts fixed to concrete floor at 1100mm centres, and 10mm mild steel horizontal intermediate rails at 100mm centres, all complete as per Drawing WD 620 Rev 0 annexed to these Bills of Quantities	m 8		
	<u>GALVANIZED PRESSED STEEL DOOR FRAMES</u>			
	<u>1,6mm Double rebated frames suitable for half brick walls</u>			
16	Jamb linings for door 813 x 2032mm high.	No 12		
17	Frame for door 813 x 2032mm high.	No 8		
	<u>1,6mm Double rebated frames suitable for one brick walls with two loose pin hinges welded to frame</u>			
18	Frame for door 813 x 2032mm high.	No 9		
19	Frame for double door 1800 x 2032mm high	No 4		
	<u>ALUMINIUM DOORS, FANLIGHTS AND SIDELIGHTS</u>			
	Carried to Collection		R	
	Bill No. 13			
	METALWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>ALUMINIUM WINDOWS</u>			
	Abutments between window door frames and surrounding faced or plastered brickwork shall be pointed internally and externally with an approved silicone sealer. Rates of aluminium windows shall be deemed to include for silicone pointing.			
	Opening sashes to be provided with standard casement hinges, pegs and stays as supplied by window manufacturer.			
	All glazed sections to be fixed with internal clip-on glazing beads and neoprene seals.			
	<u>25 Micron powder coated "Charcoal Grey" aluminium windows with fixed and opening sashes, glazed with "Monolithic Annealed" or similar approved 4mm clear float glass including black vinyl gasket and aluminium glazing beads, sub-frames, and all to be to AAAMSA standards, plugged to brickwork or concrete:</u>			
20	Window size 1800 x 1000mm high overall, with one fixed sash and one sliding sash with Reference number W01, as per Drawing Number WD601 Rev A, annexed to these Bills of Quantities	No	5	
21	Window size 1500 x 1000mm high overall, with one fixed sash with Reference number W04, as per Drawing Number WD601 Rev A, annexed to these Bills of Quantities	No	1	
22	Window size 3000 x 1000mm high overall, with three fixed sashes, with Reference number W03, as per Drawing Number WD601 Rev A, annexed to these Bills of Quantities	No	8	
23	Window size 1800 x 1000mm high overall, with one fixed sashes and one sliding sash, with Reference number W05, as per Drawing Number WD601 Rev A, annexed to these Bills of Quantities	No	3	
	Carried to Collection			
	Bill No. 13			
	METALWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Item No		Quantity	Rate	Amount R
	<p><u>25 Micron powder coated "Charcoal Grey" aluminium windows with fixed and opening sashes, glazed with "Monolithic Annealed" or similar approved 3mm obscure glass including black vinyl gasket and aluminium glazing beads, sub-frames, and all to be to AAAMSA standards, plugged to brickwork or concrete:</u></p>			
24	<p>Window size 600 x 900mm high overall, with one top hung opening sash and one fixed fixed sash, with Reference number W02, as per Drawing Number WD601 Rev A, annexed to these Bills of Quantities</p> <p>No</p>	8		
	<p><u>ALUMINIUM SHOPFRONTS</u></p> <p>Abutments between shopfront frames and surrounding faced or plastered brickwork shall be pointed internally and externally with an approved silicone sealer. Rates of aluminium shopfronts shall be deemed to include for silicone pointing.</p> <p><u>25 Micron powder coated "Charcoal Grey" aluminium shopfront with fixed lights, glazed with "Smartglass" or similar approved 6.38mm Intruder Proof normal strength laminated safety glass including black vinyl gasket and aluminium glazing beads, sub-frames, and all to be to AAAMSA standards, plugged to brickwork or concrete:</u></p>			
25	<p>Shopfront size 1500 x 2100mm high, Reference Number SF01 as per Drawing No.WD601 Rev A</p> <p>No</p>	2		
26	<p>Shopfront size 6300 x 2400mm high including double door size 1800 x 2400mm high, Reference Number SF02 as per Drawing No.WD601 Rev A</p> <p>No</p>	1		
	<p><u>STEEL ROLLER SHUTTERS, ETC</u></p> <p><u>Galvanised mild steel roller shutters fixed to brickwork or concrete:</u></p>			
27	<p>"Teckentrup motorised 0.4mm thick galvanised PU foam core Steel Thermoteck" or similar approved roller shutter including Galvanised Steel curtain box, to suit opening size 6990 x 4296mm high with TAR shaft drive and CS300 impulse with optosensor (standard) and additional open-stop-close function push button and all necessary galvanised steel fittings, FS110 galvanised steel guard rail, with frame bolted to brickwork, concrete or structural steel, all in accordance with manufacturer's recommendations.</p> <p>No</p>	1		
	<p>Carried to Collection Bill No. 13 METALWORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

D134

Item No		Quantity	Rate	Amount R
28	"Teckentrup motorised 0.4mm thick PU foam core galvanised Steel Thermoteck" or similar approved roller shutter including Galvanised Steel curtain box, to suit opening size 3000 x 3000mm high with TAR shaft drive and CS300 impulse with optosensor (standard) and additional open-stop-close function push button and all necessary galvanised steel fittings, FS85 galvanised steel guard rail, with frame bolted to brickwork, concrete or structural steel, all in accordance with manufacturer's recommendations.	No 5		
29	"Teckentrup motorised 0.4mm thick galvanised PU foam core Steel Thermoteck" or similar approved roller shutter including Galvanised Steel curtain box, to suit opening size 3000 x 2100mm high with TAR shaft drive and CS300 impulse with optosensor (standard) and additional open-stop-close function push button and all necessary galvanised steel fittings, FS85 galvanised steel guard rail, with frame bolted to brickwork, concrete or structural steel, all in accordance with manufacturer's recommendations.	No 1		
30	Teckentrup 72 E", T30-1-FSA" or similar approved fire resistant, single leaf sliding steel door, 72mm thick, size 3000 x 2100mm complete with all accessories as detailed in Drawing No WD600 Rev annexed to these Bills of Quantities	No 2		
<u>STEEL STRONGROOM DOORS, ETC.</u>				
<u>"Chubb Safes" or similar approved Category 2 Strong room doors and frame</u>				
31	Right hand opening category 2 heavy duty strong room door and frame, Door size 750 x 1860mm high, Code MSRD53, fixed to walls in accordance with the manufacturer's instructions, including 7-lever security keylocks mechanism, and a floor mounted door stop	No 1		
<u>"Mutual Austen" or other SABS approved strongroom doors and frames, etc., suitable for 230mm walls and fixed to brickwork or concrete :</u>				
32	Double ended strongroom ventilator.	No 1		
Carried to Collection			R	
Bill No. 13				
METALWORK				
THE NEW PIER STATE WAREHOUSE FOR SARS				
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<u>DOCK LEVELLERS, ETC</u>			
	<u>"Stab-a-load" Kelly AFX 710 or similar approved dock leveller fixed to concrete including all preparatory work:</u>			
33	Dock leveller size 2845mm long x 2110mm wide x 500mm deep	No 5		
	<u>LOUVRE VENTS, ETC</u>			
	<u>"Trox Technik" or similar approved weather resistant galvanized louvres</u>			
34	1200 x 600mm High Type WG louvres comprising masonry subframes, frames, 25 x 25mm wire mesh screen, 83mm long blades at 82mm centres coated to RAL colour, all to be in accordance with manufacturer's specifications fixed into brickwall with standard flanges, Refer Drawing No WD701 Rev0 annexed to these Bills of Quantities	No 6		
35	4000 x 1380mm High Type WG louvres comprising masonry subframes, frames, 25 x 25mm wire mesh screen, 83mm long blades at 82mm centres coated to RAL colour, all to be in accordance with manufacturer's specifications fixed into brickwall with standard flanges, Refer Drawing No WD701 Rev0 annexed to these Bills of Quantities	No 24		
36	3950 x 1856mm High Purpose made Type WG louvres comprising masonry subframes, frames, 25 x 25mm wire mesh screen, 83mm long blades at 82mm centres coated to RAL colour, all to be in accordance with manufacturer's specifications fixed into brickwall with standard flanges, Refer Drawing No WD701 Rev0 annexed to these Bills of Quantities	No 4		
37	184000 x 450mm High Purpose made Type WG louvres to sides of roof apex, comprising masonry subframes, frames, 25 x 25mm wire mesh screen, 83mm long blades at 82mm centres coated to RAL colour, all to be in accordance with manufacturer's specifications fixed into brickwall with standard flanges, Refer Drawing No WD701 Rev0 annexed to these Bills of Quantities	No 2		
	Carried to Collection		R	
	Bill No. 13			
	METALWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
38	<p>850 x 450mm High Purpose made Type WG louvres to gable ends of roof apex, comprising masonry subframes, frames, 25 x 25mm wire mesh screen, 83mm long blades at 82mm centres coated to RAL colour, all to be in accordance with manufacturer's specifications fixed into brickwall with standard flanges, Refer Drawing No WD701 Rev0 annexed to these Bills of Quantities</p> <p>No</p>	2		
<p>Carried to Collection</p> <p>Bill No. 13</p> <p>METALWORK</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			R	

Bill No. 13

METALWORK

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

143

144

145

146

147

148

149

150

151

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 13

METALWORK

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<u>BILL NO 14</u>			
	<u>PLASTERING</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	25mm Thick on floors and landings	m2	101	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or concrete</u>			
2	On walls	m2	699	
3	In narrow widths	m2	10	
	<u>Cement plaster on brickwork or concrete previously plastered</u>			
4	On walls	m2	4 766	
5	On narrow widths	m2	29	
	<u>EXTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork or concrete</u>			
6	On walls	m2	2 456	
7	On narrow widths	m2	37	
	Carried to Collection			
	Bill No. 14			
	PLASTERING			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Item No		Quantity	Rate	Amount R
	<u>SPECIALIST WALL COATINGS</u>			
	<u>"Flowcrete Flowseal EPW" or similar approved epoxy based wall coatings</u>			
	<u>Lightly sand the entire surface to provide a suitable key, wipe down area with damp cloth, prime wall with 1 coat Flowseal EPW Primer, and allow curing, apply 2 coats Flowseal EPW coating at 8m2 per litre, allow curing, all to be applied in strict accordance with manufacturer's instructions</u>			
8	Previously plastered and painted walls.	m2	657	
9	New plastered walls	m2	88	
	<u>Lightly sand the entire surface to provide a suitable key, wipe down area with damp cloth, prime wall with 1 coat Flowseal EPW Primer, and allow curing, apply 3 coats Flowseal EPW coating at 8m2 per litre, allow curing, all to be applied in strict accordance with manufacturer's instructions</u>			
10	Previously plastered and painted walls.	m2	18	
11	New plastered walls	m2	18	
	Carried to Collection			
	Bill No. 14			
	PLASTERING			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Bill No. 14

PLASTERING

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

153

154

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 14

PLASTERING

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	BILL NO 15 TILING <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> SUPPLEMENTARY PREAMBLES <p>Descriptions</p> <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 plaster bedding</p> <p>Prime cost amounts shall include for ordering of materials from drawings and delivery of materials to site. The areas measured are the net area of tiling laid and the contractor shall include in his rate for all waste of materials, approved adhesive , jointing compound, labour to complete and markup,.</p> WALL TILING <u>Wall tiles fixed with adhesive to plastered walls and flush pointed with tinted waterproof jointing compound (Allow a PC Amount of R200/m2 for tile , adhesive and jointing compound, including delivery to site)</u>			
1	In splash backs, etc	m2	2	
	FLOOR TILING <u>Floor tiles fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted waterproof jointing compound (Allow a PC Amount of R300/m2 for tile , adhesive and jointing compound, including delivery to site)</u>			
2	On floors and landings	m2	118	
	Carried to Collection Bill No. 15 TILING THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN		R	

Item No		Quantity	Rate	Amount R
	<u>Skirtings</u>			
3	100mm High tile skirting	m 16		
Carried to Collection Bill No. 15 TILING THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				R

Bill No. 15

TILING

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

156

157

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 15

TILING

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	BILL NO 16			
	PLUMBING AND DRAINAGE			
	<p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p>Note: Prices for all stormwater drainpipes in ground are to include for bedding on and surrounding with approved granular material supplied and carted on to site by the contractor to a minimum thickness of 150mm below and 300mm above the pipe and for depositing the excavated material in spoil heaps where directed on site.</p>			
	RAINWATER DISPOSAL			
	'Ogee' seamless aluminium			
1	"Watertite Guttering" or similar approved commercial and industrial Ogee profile aluminium H3003h 14 seamless gutter, overall size 150 x 125 x 0,8mm thick coated internally and externally with ColourTech G4 in colour Marble White with matching splashplate including cut and mitred angles covered with a mitre strip externally, stop ends crimped and all sealed on the inside with Dow Corning 813 silicone sealer, secured to metal roof sheets with 25 x 2,5mm L - Shaped and 20 x 2,5mm Australian hanger brackets at 600mm centres using aluminium pop rivets, including expanded aluminium mesh leaf guard set over gutter with 101mm diameter x 1,62mm thick aluminium downpipe in colour Marble White fixed to wall with holderbats, with downpipes riveted and silicone sealed to gutter outlets, including all necessary bends, elbows, shoes etc.	m	393	
2	Extra over gutter for stopped ends	No	32	
3	Extra over gutter for 101mm diameter downpipe outlet	No	32	
4	101mm Diameter aluminium downpipe fixed to walls with approved holderbats	m	258	
5	Extra over for adjustable offset approximately 900m long	No	32	
6	Extra over for 101mm diameter shoe	No	32	
	Carried to Collection			
	Bill No. 16			
	PLUMBING AND DRAINAGE			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

D134

Item No		Quantity	Rate	Amount R
	<u>Sumps, Gulleys, etc</u>			
7	300 x 300mm Precast gulley concrete top, 110mm gulley and grating	No 34		
8	Sump size 800 x 800 x 900mm deep internally, comprising 150mm thick, 25Mpa/19mm concrete surface bed, 200mm thick concrete walls, including formwork and reinforcement at 120kg per cubic meter of concrete, complete including all necessary excavations, filling and backfilling, carting away of excess material from excavations, 905 x 905mm heavy duty Mentis Rectagrid RS40 and 40 x 4.5 banded HDG stormwater cover, and opening for 300/450mm diameter pipe.	No 2		
	<u>SANITARY FITTINGS</u>			
	<u>'Vaal Sanitaryware' vitreous china wash hand basins</u>			
9	510 x 405mm 'Hibiscus' white vitreous china rounded lavatory basin (product code 702303) with three semi-punched with integrated overflow and chain stay hole through the centre semi punched tap hole, bolted to wall with two 10mm bolts (product code 8448ZO) complete with plug and chain.	No 11		
	<u>'Vaal Sanitaryware' vitreous china water closets:</u>			
10	Vaal Sanitaryware "Urban Life" vitreous china (Product Code : 439300), comprising 90° back inlet closed rim wall hung pan, with quality soft-close seat, a concealed cistern, (Product Code: 710935) or a concealed flush valve, with bolt through the wall bracket (Product Code : 8084ZO) and DPI flushfit pan collar or equivalent	No 7		
11	Vaal Sanitaryware "Protea Paraplegic" vitreous china floor mounted paraplegic washdown suite colour White (code: 750200) comprising 90° outlet pan (code: 7502) and matching 9 litre cistern (code: 710631), including lid, fitments and purpose-made chromium plated side flush lever.	No 1		
	<u>WASTE UNIONS ETC</u>			
12	40mm Basin waste union	No 11		
	Carried to Collection		R	
	Bill No. 16			
	PLUMBING AND DRAINAGE			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
	<u>TRAPS ETC</u>			
	<u>"Cobra Watertech"</u>			
13	Cobra Watertech 40mm chrome plated deep seal bottle trap with outlet for 50mm PVC (Code: 365/50).	No 11		
	<u>Brass</u>			
14	50mm Rough brass shower P-trap (VA 2341 1 1/2")	No 2		
Carried to Collection				R
Bill No. 16				
PLUMBING AND DRAINAGE				
THE NEW PIER STATE WAREHOUSE FOR SARS				
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<u>TAPS, VALVES, ETC</u>			
	<u>"Cobra Watertech"</u>			
15	Cobra Watertech 15mm chrome plated elbow action raised nose pillar tap with blue indicator for cold water (Code: 503-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	22	
16	Cobra Watertech 15mm x 50mm diameter chrome plated Concorde shower head with ball-jointed connector (Code: 068BJ).	No	2	
17	Cobra Watertech 15mm x 50mm diameter chrome plated Concorde shower rose with ball-jointed connector (Code: 068BJ).	No	2	
18	15mm Stop cock	No	19	
19	Flushmaster Junior WC valve	No	8	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
20	110mm Pipes	m	26	
21	50mm Pipe	m	59	
	<u>Extra over uPVC pipes for fitting</u>			
22	110 x 50mm Access reducing junction	No	26	
23	50mm Bend	No	52	
24	50mm Junction	No	26	
	<u>Sundries</u>			
25	Testing waste pipe system	Item		
	Carried to Collection			
	Bill No. 16			
	PLUMBING AND DRAINAGE			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No			Quantity	Rate	Amount R
	<u>COLD WATER SUPPLIES</u>				
	<u>Class I copper (hard drawn) pipes</u>				
26	15mm Pipes to walls, etc	m	50		
27	Ditto but chased in	m	33		
28	22mm Pipes to walls, etc	m	99		
	<u>Extra over class I copper (hard drawn) pipes for capillary fittings</u>				
29	15mm Fittings	No	165		
30	22mm Fittings	No	198		
	<u>Extra over class I copper (hard drawn) pipes for brass compression fittings</u>				
31	15mm Fittings	No	66		
32	22mm Fittings	No	132		
33	Testing the entire system		Item		
	<u>HOT WATER SUPPLIES</u>				
	<u>Class I copper (hard drawn) pipes including lagging where deemed necessary</u>				
34	15mm Pipes to walls, etc	m	10		
35	Ditto but chased in	m	16		
36	22mm Pipes to walls, etc	m	24		
37	Ditto but chased in	m	14		
	<u>Extra over class I copper (hard drawn) pipes for capillary fittings</u>				
38	15mm Fittings	No	34		
39	22mm Fittings	No	56		
	Carried to Collection			R	
	Bill No. 16				
	PLUMBING AND DRAINAGE				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

D134

[illegible]

Bill No. 16

PLUMBING AND DRAINAGE

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

159

160

161

162

163

164

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 16

PLUMBING AND DRAINAGE

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<u>BILL NO. 17</u>			
	<u>ELECTRICAL WORK</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>Supply and installation of the items as detailed below. All material used shall be SABS approved.</u>			
	<u>STRIPPING</u>			
1	Allow for stripping and removal of the existing Distribution Boards, complete with supply cables, redundant wiring, conduits, trunking, luminaires, socket outlets, isolators, etc.		SUM	
	<u>LV DISTRIBUTION BOARDS</u>			
	<u>Distribution Board complete with all accessories sheet metal frames, sub-frames, bus-bars, fixtures and fittings as specified with all equipment fitted in factory.</u>			
2	Supply and install new surface mounted distribution board DB-G complete with all necessary accessories and maximum demand and kWh meters equivalent to Enermax Meter, as per drawings.	No	1	
3	Supply and install surface mounted Distribution Board DB-G1 in the Ground Floor, complete with all necessary accessories, as per drawings.	No	1	
4	Supply and install flush mounted Distribution Board DB-G2 in the Ground Floor, complete with all necessary accessories, as per drawings.	No	1	
5	Supply and install flush mounted Distribution Board DB-F in the First Floor, complete with all necessary accessories, as per drawings.	No	1	
6	Supply and install flush mounted Distribution Board DB-SC in the Ground Floor Security room, complete with all necessary accessories, as per drawings.	No	1	
7	Supply and install 400x400mm Telephone Distribution Board	No	2	
	Carried to Collection		R	
	Bill No. 17			
	ELECTRICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No			Quantity	Rate	Amount R
	<u>CABLE INSTALLATIONS</u>				
	<u>Rate shall include for the supply, delivery and installation of 600/1000V PVC/PVC/SWA/PVC/Cu cable in shaft, sleeve, trench, on cable rack or on surface, including strapping or clamping, supports, etc.</u>				
8	70mm ² x 4 core	m	140		
9	25mm ² x 4 core	m	215		
10	16mm ² x 4 core	m	380		
11	10mm ² x 4 core	m	420		
12	16mm ² x 3 core	m	95		
	<u>Cable Terminations</u>				
	<u>Supply, install, terminate and connect 600/1000V PVC/SWA/PVC/Cu cable including drilling, bolting, lugs, number tags, core markers, glands, shrouds, etc.</u>				
13	70mm ² x 4 core	No	2		
14	25mm ² x 4 core	No	4		
15	16mm ² x 4 core	No	14		
16	10mm ² x 4 core	m	12		
17	16mm ² x 3 core	m	2		
	<u>Copper earth conductor in trench or sleeve, on racking, steelwork or strapped to cable.</u>				
18	70 mm ² BCEW	m	140		
19	25mm ² BCEW	m	215		
20	16mm ² BCEW	m	220		
21	16mm ² insulated earth wire (Green/Yellow)	No	100		
22	10mm ² BCEW	No	220		
	Carried to Collection				R
	Bill No. 17				
	ELECTRICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No			Quantity	Rate	Amount R
	<u>Copper earth conductor terminations</u>				
23	70 mm ² BCEW	No	2		
24	25mm ² BCEW	No	4		
25	16mm ² BCEW	No	6		
26	10mm ² BCEW	No	12		
	<u>CONDUIT</u>				
	<u>Supply and install SABS approved PVC conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. cast in concrete, built or chased into brickwork or surface mounted to any surface.</u>				
27	20mm Conduit	m	800		
28	25mm Conduit	m	4 000		
29	32mm Conduit	m	1 000		
30	50mm Conduit	m	300		
	<u>Galvanized steel conduit conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. cast in concrete, built or chased into brickwork or surface mounted to any surface.</u>				
31	20mm Conduit	m	100		
32	25mm Conduit	m	200		
	<u>CONDUIT BOXES</u>				
	<u>Supply and install surface or flush mounted galvanized conduit boxes including fixing to conduit with necessary locknuts, adaptors, bushes, etc.</u>				
33	100 x 100 x 50mm Outlet box	No	40		
34	100 x 50 x 50mm Outlet box	No	12		
35	60mm Round outlet box	No	100		
36	60mm Diameter cover plate	No	40		
	Carried to Collection				R
	Bill No. 17				
	ELECTRICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

D134

Item No			Quantity	Rate	Amount R
37	100 x 100 Blank cover plates	No	5		
38	100 x 50 Blank cover plates	No	5		
39	Draw-wire pulled into conduits	m	400		
Carried to Collection Bill No. 17 ELECTRICAL WORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN					R

Item No			Quantity	Rate	Amount R
	<u>FITTINGS AND ACCESSORIES</u>				
	<u>Supply and Install wall mounted industrial fittings and accessories complete with all necessary screws, cover plates, labelling, cradles, including all holes, drilling, etc.</u>				
40	16A, 3-Pin flush mounted single switched socket outlet	No	20		
41	16A, 3-Pin flush mounted double switched socket outlet	No	35		
42	16A, 3-Pin power skirting mounted dedicated double switched socket outlet (Red)	No	2		
43	16A, 3-Pin power skirting mounted normal single switched socket outlet (White)	No	45		
44	16A, 3-Pin power skirting mounted dedicated single switched socket outlet (Red)	No	46		
45	16A, 3-Pin power skirting mounted dedicated single switched socket outlet (Blue)	No	4		
46	20A Telkom isolator	No	4		
47	Corporate connection c/w 1 x normal SSO, 1 x dedicated SSO, 1 x telephone and 1 x data outlet	No	14		
48	20Amp flush mounted single phase hand dryer isolator	No	4		
49	20Amp flush mounted single phase A/C isolator	No	14		
50	30Amp flush mounted single phase roller shutter door isolator	No	8		
51	30Amp surface mounted three phase isolator for the roller shutter door	No	2		
52	100Amp surface mounted weatherproof three phase isolator for the smoke extract fan.	No	2		
53	32A Three phase welding plug	No	7		
	Carried to Collection				R
	Bill No. 17				
	ELECTRICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<u>POWERSKIRTING</u>			
	<u>2 Compartment 2 cover Series N8 motor craft grey power skirting as per specification and drawings, complete with cover plates, splices, earthing, powder coating, etc. and all accessories to complete the installation.</u>			
54	2 compartment powerskirting	m	210	
55	Ditto 90 deg. External/internal elbow	No	9	
56	Ditto Tee bend	No	7	
57	Ditto end caps	No	18	
58	Telephone and data outlet cover plates suitable for mounting on power skirting	No	45	
	<u>LUMINAIRES</u>			
	<u>The supply, installation and electrical connection of light fittings, including cost of fittings, complete with lamps, including bolts, nuts, brackets, cable with 5A plug/top, cut-outs in ceiling, identification marks, etc.</u>			
59	Type F2 - 2x28W T5 Open channel fluorescent luminaire complete with an electronic gear. IP20.	No	40	
60	Type F3 - 2x28W T5 recessed fluorescent luminaire with double parabolic louvers separated by perforated infills panels c/w electronic gear. IP20.	No	20	
61	Type F4 - 3x54W T5 recessed fluorescent luminaire with double parabolic louvers separated by perforated infills panels c/w electronic gear. IP20.	No	18	
62	Type T1- 4x80W T5 surface mounted medium beam T-Bay fluorescent fitting complete with electronic gear.	No	130	
63	Type D1 - 1x18W CFL recessed sealed downlighter.	No	20	
64	Type D2 - 4.5/10W LED downlight	No	15	
65	Type B1 - 85W LED wall mounted flood light similar or equal to Beka LEDnova	No	25	
	Carried to Collection		R	
	Bill No. 17			
	ELECTRICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

[illegible]

Item No			Quantity	Rate	Amount R
	<u>CONDUCTORS</u>				
	<u>600/1000V PVC insulated conductors into conduit, trunking, including conductor identification labels, terminating, etc.</u>				
70	2.5 mm ² conductor	m	8 000		
71	4.0 mm ² conductor	m	4 000		
72	6.0 mm ² conductor	m	2 000		
	<u>Bare copper earth conductor into conduit, trunking, etc</u>				
73	4.0 mm ² insulated earth	m	3 000		
74	4.0 mm ² conductor	m	3 000		
	<u>APPLIANCE CONNECTIONS</u>				
	<u>Flexible steel connections complete with adaptors, locknuts, bushes, labelling, etc. not exceeding 2 metres or approved termination kit.</u>				
75	Hand Drier - Single phase Isolator	No	4		
76	Air conditioning - single phase Isolator	No	15		
77	Air conditioning - three phase Isolator	No	8		
78	Roller shutter doors - single phase isolator	No	10		
79	Smoke extract fans - Three phase isolator	No	2		
	<u>Cable Tray</u>				
	<u>Supply and installation of pre-galvanised heavy duty cable tray, complete with all accessories, support brackets, splices, etc.</u>				
80	300 cable ladder	m	300		
81	300 cable ladder 90 deg. Bends	No	4		
82	300 cable ladder "T's"	No	2		
	Carried to Collection			R	
	Bill No. 17				
	ELECTRICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<u>Cable Tray</u>			
	<u>Supply and installation of pre-galvanised medium duty cable tray, complete with all accessories, support brackets, splices, etc.</u>			
83	300 Wide cable tray	m	420	
84	150 Wide cable tray	m	520	
85	100 Wide cable tray	m	80	
86	300 Wide cable tray 90 deg. Bends	No	4	
87	150 Wide cable tray 90 deg. Bends	No	12	
88	100 Wide cable tray 90 deg. Bends	No	4	
89	300 Wide cable tray "T's"	No	2	
90	150 Wide cable tray "T's"	No	12	
	<u>TRUNKING</u>			
91	P2000 trunking complete with accessories	m	1 800	
92	P2000 90 deg. Bends	No	22	
93	P2000 "T's"	No	14	
	<u>Manholes</u>			
94	Supply and Install 600x600x800 manhole with heavy duty cast iron cover.	No	4	
	<u>LABELLING</u>			
	<u>Supply and install labelling of switches, socket outlets, isolators, etc. Labels shall be engraved Trafalite or similar plastic material or ivory sandwiched strips and shall be fixed by means of machine screws or aluminium channeling. The strips shall bear white lettering on a black background for normal labels and red letters on a white or yellow background for danger notices</u>			
95	labels		SUM	
	Carried to Collection		R	
	Bill No. 17			
	ELECTRICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

[illegible]

Bill No. 17

ELECTRICAL WORK

COLLECTION PAGE

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

Total Brought Forward from Page No.

**Page
No****Amount
R**

166

167

168

169

170

171

172

173

174

175

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 17

ELECTRICAL WORK

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	BILL NO. 18 MECHANICAL WORK PRELIMINARY AND GENERAL COSTS <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p>			
1	<p>The tenderer shall allow for whatever costs he may deem necessary for preliminary and general items to carry out the mechanical and fire installations as detailed in the conditions of contract, specifications, and Bill of Quantities as indicated on the drawings for this project</p> <p>Supply and installation of the items as detailed below. All material used shall be SABS approved.</p> <p>SPRINKLERS</p> <p>FIXED AUTOMATIC FIRE SPRINKLER INSTALLATION</p> <p>These bills of quantities form part of and must be read in conjunction with the Tender Drawings, which contain the full descriptions of the work to be done and material and equipment to be used.</p> <p>All materials, equipment, fixings, brackets, supports etc, are to be supplied by the Contractor unless otherwise stated, and are deemed to be included in the rates.</p> <p>SPRINKLER HEADS</p>	Item		
2	<p>68°C Exposed brass sprinkler heads, complete with range pipe, hangers and fittings, including painting of new sprinklers pipework with two coats of signal red colour paint in accordance with SANS 10140-3:2003.</p>	No	1 101	
3	<p>68°C Exposed brass sprinklers (in-rack), complete with wire guards, range pipe, hangers and fittings, including painting of new sprinklers pipework with two coats of signal red colour paint in accordance with SANS 10140-3:2003.</p>	No	385	
	<p>Carried to Collection Bill No. 18 MECHANICAL WORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

D134

Item No		Quantity	Rate	Amount R
4	68°C Quick response white pendant ceiling sprinklers, complete with distribution mains, range pipes, hangers, fittings and rosettes, including painting of new sprinklers pipework with two coats of signal red colour paint in accordance with SANS 10140-3:2003.	171		
	<p data-bbox="948 421 986 448">No</p> <p data-bbox="172 1861 798 2018"> Carried to Collection Bill No. 18 MECHANICAL WORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN </p>		R	

Item No		Quantity	Rate	Amount R
	<u>PIPEWORK</u>			
	<u>Black mild steel piping in accordance with SANS 719 shall be used for sprinkler pipe installations.</u>			
5	150mm dia Sprinkler mains : Black steel pipe with hangers and fittings, including painting with two coats of signal red colour paint in accordance with SANS 10140-3:2003.	m	550	
6	150mm dia Trunk mains, including valves and fittings between the Pump room and Installation Control Valves.	m	75	
	<u>TEST ARRANGMENT</u>			
7	Terminal test arrangement, including lockable valve and plug.	No	2	
	<u>SPRINKLER INSTALLATION CONTROL VALVE CHAMBER</u>			
8	150mm dia wet system Sprinkler Installation Control Valve (ICV) complete with alarm valve, main stop valve, alarm gong, water proving test, drain valve, gauges, and all trim to ASIBs specifications.	No	2	
9	Flow switches	No	2	
	<u>PUMPSET</u>			
10	Supply and install an ASIB approved automatic fire sprinkler booster pump-set delivering 4800/ min @ 850kPa, comprising of a diesel-driven primary pump and electric-driven secondary pump.	Sets	1.0	
	<u>All of the above mounted complete with an electrical control panel suitable for wall mounting, indicator panels, remote annunciator, 24V diesel and annunciator panel complete with batteries, sensors, diesel tank complete with refill pump, all pressure gauges, pressure switches, flow switches, pump automatic start arrangement, test arrangement, extractor fan, etc.</u>			
11	Supply and install Jockey pump for the sprinklers installation.	No	1	
12	Pump room piping and controls.		SUM	
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>SPRINKLER WATER STORAGE TANK</u>			
13	Supply and install sectional steel sprinkler water storage tank as per supplier specifications and drawings, similar or equal to "Abeco" modular tank, made from 1.22m x 1.22m standard steel panels. Tank to include 2-off diameter 100mm inlet ports, 2-off diameter 150mm overflow, 2-off diameter 200mm delivery, and 2-off diameter 80mm drain ports, 2-off vortex inhibitors and sumps, 4-off 600mm x 600mm tank access manhole, 4-off internal cat ladders, 4-off external cat ladders, lever indicators, etc, capacity to be 470m3, dimensions to be 12.2m length x 8.54m width x 4.88m height, and panels to be 280	No 1		
14	Piping, fittings and valves for the water tank.		SUM	
	<u>TESTING & COMMISSIONING</u>			
15	Allow for testing and commissioning of the sprinklers installation after completion in accordance with Fire Department and ASIB requirements.		SUM	
	<u>ASIB INSPECTIONS</u>			
16	Allow for inspections by ASIB.		SUM	
	<u>DRAWINGS</u>			
17	Submission of workshop working drawings for approval prior to installation of the sprinkler system.	Sets 1.0		
18	Submission of 'As Built' drawings in AutoCAD format indicating the final positions of the sprinklers installation equipment as installed by the Contractor, with hard copies inserted in the O & M Manuals.	Sets 1.0		
	<u>OPERATION & MAINTENANCE MANUALS</u>			
19	Compilation and submission of Operating and Maintenance Manuals for the sprinklers installation installations.	No 4		
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>FIRE HYDRANTS, FIRE HOSE REELS & FIRE EXTINGUISHERS</u> These bills of quantities form part of and must be read in conjunction with the Tender Drawings, which contain the full descriptions of the work to be done and material and equipment to be used. All materials, equipment, fixings, brackets, supports, etc are to be supplied by the contractor unless otherwise stated, and are deemed to be included in the rates <u>TWIN FIRE BOOSTER CONNECTION</u>			
20	65mm twin fire booster connection complete with reflux valve and connection couplings. No	1		
	<u>FIRE HYDRANT</u>			
21	65mm right angled pattern fire hydrant complete with coupling. No	4		
	<u>FIRE HOSE REELS</u>			
22	Approved fire hose reel fitted with 30m length of 20mm hose mounted on wall bracket bolted to wall, complete with chromium plated stop cock and shut-off nozzle. No	16		
	<u>FIRE EXTINGUISHERS</u>			
23	9kg Dry Chemical Powder (DCP) type fire extinguisher with bracket fixed to and including 25 x 100 x 450mm polished hard wood backboard with chamfered edges plugged to brick wall. No	50		
24	5kg Carbon Dioxide (CO2) type fire extinguisher with bracket fixed to and including 25 x 100 x 450mm polished hard wood backboard with chamfered edges plugged to brick wall. No	6		
	<u>INVESTIGATION OF EXSITING COLD WATER SUPPLY PIPEWORK</u>			
25	Allow for inspection and investigation of existing water reticulation installation to locate the cold water mains, pipe runs and entry points into the building, including excavation, isolation,connecting into existing pipework for new fire water feed and backfilling.		SUM	
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>PIPEWORK</u>			
	<u>High Pressure HDPE Pipework (Class 12)</u>			
	<u>High pressure High Density Polyethylene (HDPE) pipe for use underground, including couplers, sockets, etc, in the running length, on class 'B' bedding, including excavations on pickable material, backfilling and compaction, installed in accordance with SANS 1200, SANS 10400 and SANS 10252-1.</u>			
26	110mm diameter high pressure class 12 HDPE pipe laid in ground not more than 1000mm deep.	m	440	
	<u>Extra over HDPE pipework for 'Plasson' compression fittings:</u>			
	<u>Bends</u>			
27	110mm diameter bend	No	10	
28	110mm diameter 45o elbow	No	10	
	<u>Tees</u>			
29	110mm diameter tee	No	5	
30	110mm diameter 45o tee	No	1	
	<u>Reducers</u>			
31	110 x 65mm diameter reducer	No	5	
32	110 x 50mm diameter reducer	No	2	
	<u>Adaptors</u>			
33	110mm plastic to steel adaptor	No	5	
34	50mm plastic to steel adaptor	No	2	
	Carried to Collection			
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Item No		Quantity	Rate	Amount R
	<u>Galvanised Mild Steel Pipework</u>			
	<u>Medium class galvanised mild steel (GMS) screwed and socketed pipes to SANS 62, installed in accordance with SANS 0400:1990 and SANS 10252-1:2004, including couplers in the running length, and all necessary supports, fixing, brackets, saddlers, holderbats, etc, and painted red in accordance with SANS 10140-3:2003:</u>			
35	50mm diameter pipe fixed to wall.	m	450	
36	32mm diameter pipe fixed to wall.	m	20	
37	25mm diameter pipe fixed to wall.	m	170	
	<u>Extra over GMS pipework for fittings, as shown on the tender drawings:</u>			
	<u>Bends</u>			
38	50mm diameter bend	No	20	
39	32mm diameter bend	No	6	
40	25mm diameter bend	No	30	
	<u>Tees</u>			
41	50mm diameter tee	No	16	
42	32mm diameter tee	No	1	
43	25mm diameter tee	No	1	
	<u>Reducers</u>			
44	50mm x 25mm reducer	No	16	
45	50mm x 40mm reducer	No	1	
46	50mm x 32mm reducer	No	2	
47	32mm x 25mm reducer	No	2	
	<u>VALVES</u>			
48	50mm diameter isolation gate valve	No	2	
	Carried to Collection			
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>FIRE AND ESCAPE SIGNAGE</u>			
	<u>Photoluminescent signage and warning notices in accordance with SANS 1186-1: 2008, and incorporating the pictographs in the standard size 300 x 300mm, securely fixed to wall, door, ceiling, purlins, or soffit as shown on fire protection drawings.</u>			
49	Type F4, red arrow and red figures on white background with 4mm red border line: Location of fire fighting equipment: fire extinguisher; fire hose reel.	No 16		
50	Type F13, red arrow and red figure on white background with 4mm red border line: Location of fire fighting equipment: fire extinguisher.	No 32		
51	Type F15, red arrow and red figure on white background with 4mm red border line: Location of fire fighting equipment: fire hydrant (left)	No 5		
52	Type F45, white background with 4mm red border line with red letters: FIRE EXIT KEEP CLEAR.	No 6		
53	Type E1, green background with white arrow and white figure: Direction of escape route (right)	No 5		
54	Type E2, green background with white arrow and white figure: Direction of escape route (left)	No 5		
55	Type E4, white background with 4mm red border line with letters and arrow: EXIT (right)	No 5		
56	Type E5, white background with 4mm red border line with letters and arrow: EXIT (left)	No 5		
57	Type E6, white background with 4mm red border line with letters: EXIT	No 11		
58	Type E10, green background with white arrow and white figure: Direction of escape route (straight ahead).	No 15		
59	Type E16, green background with white arrow and white figures: Direction to escape route (downstairs right)	No 2		
60	Type E17, green background with white arrow and white figures: Direction to escape route (downstairs left).	No 2		
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>TESTING & COMMISSIONING</u>			
61	Allow for testing and commissioning of the fire protection installation after completion in accordance with EMS Fire Department requirements.		SUM	
	<u>GUARANTEE & MAINTENANCE</u>			
62	Guarantee equipment and 12-month maintenance period.		SUM	
	<u>TRAINING</u>			
63	Training of SARS Staff on operation of the fire equipment, i.e. fire hose reels and fire extinguishers.		SUM	
	<u>'AS BUILT' DRAWINGS</u>			
64	Submission of marked up 'As Built' hardcopy drawings indicating the final positions of the fire protection equipment as installed by the Contractor, with hard copies inserted in the O & M Manuals. Sets	1.0		
	<u>OPERATION & MAINTENANCE PROCEDURES</u>			
65	Submission of 4 No copies of operation and maintenance procedures for the fire equipment.		SUM	
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No			Quantity	Rate	Amount R
	<u>AIRCONDITIONING</u>				
	<u>VRV System</u>				
	<u>Water cooled VRV units</u>				
	<u>Supply, installation and commissioning</u>				
	<u>VRV Outdoor / Condensing units</u>				
66	26.7 kW cooling # Water cooled VRV unit c/w master controllers and electrical panels.	No	2		
67	Rigging of VRV units into position	No	2		
68	Anti#vibration pads	No	8		
69	Galvanized steel mounting brackets c/w mounting bolts and anchors	No	4		
	<u>VRV Indoor / Evaporator units</u>				
70	3.8 kW cooling # Cassette Unit c/w mounting brackets controller, controls, control wiring and associated devices to function as VRV units	No	5		
71	10.5 kW cooling # Cassette Unit c/w mounting brackets controller, controls, control wiring and associated devices to function as VRV units	No	1		
72	7.1 kW cooling # Cassette Unit c/w mounting brackets controller, controls, control wiring and associated devices to function as VRV units	No	2		
73	11.2 kW cooling # Underceiling Unit c/w mounting brackets controller, controls, control wiring and associated devices to function as VRV units	No	2		
	<u>Refrigeration piping</u>				
74	1 3/8 " Copper refrigeration piping c/w associated fittings and insulation	m	115		
75	3/4 " Copper refrigeration piping c/w associated fittings and insulation	m	115		
	Carried to Collection			R	
	Bill No. 18				
	MECHANICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

D134

Item No			Quantity	Rate	Amount R
76	5/8 " Copper refrigeration piping c/w associated fittings and insulation	m	48		
77	1/2 " Copper refrigeration piping c/w associated fittings and insulation	m	90		
78	3/8 " Copper refrigeration piping c/w associated fittings and insulation	m	48		
79	1/4 " Copper refrigeration piping c/w associated fittings and insulation	m	60		
	<u>Closed Circuit Cooling Tower</u>				
80	75kW THR Closed Circuit Cooling Tower c/w spray pumps	No	1		
81	Rigging of the Closed Circuit Cooling Tower into position	No	1		
82	Anti#vibration pads	No	4		
	<u>Condenser Water Circuit</u>				
83	Condenser Water Pumps # 3.25 l/s @ 17 m cw drian connections, drain pan, electrical motor, innetia base and av mountings	No	2		
84	Straight Galvanized Pipe, Ø 50mm	m	21		
85	Galvanized Bends, Ø 50mm	No	20		
86	Galvanized Tee, Ø 50mm	No	4		
87	Butterfly valve, Ø 50mm	No	10		
88	Non#return valve, Ø 50mm	No	2		
89	Balancing valve,Ø 50mm	No	2		
90	Strainer, Ø 50mm	No	2		
91	Flexible Pipe Connection, Ø 50mm	No	2		
92	Galv. Reducers from Ø 50mm down	No	4		
93	Galv. Flanged set, Ø 50mm	No	6		
94	Thermometer and pocket	No	6		
	Carried to Collection			R	
	Bill No. 18				
	MECHANICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

D134

Item No			Quantity	Rate	Amount R
95	Pressure gauge and pocket	No	12		
96	Binder point and pocket	No	12		
97	BMS thermostat pocket	No	12		
98	Flow switch pocket	No	4		
99	Drain points	No	4		
100	Auto air vent and socket	No	2		
	<u>Electrical Works</u>				
	<u>Electrical</u>				
	Motor Control Centre c/w instrumentation, locks and switches, switchgear and termination of incoming cable, to house the following switchgear				
	- primary condenser water pumps (chilled water and condenser water)				
101	- Power supply to VRV system		Item		
102	- Cooling tower Fan and VSD		Item		
103	- Cooling tower spray pumps		Item		
104	- controls		Item		
105	- 1 cubicle for future use		Item		
106	Wiring from MCC to all equipment		Item		
107	Plant room wiring		Item		
108	Electrical field wiring to all equipment to include cable ways, conduits and supports		Item		
109	Wiring from MCC to all equipment in chiller plant room (size 2)		Item		
110	Variable Speed Drives		Item		
111	c/w wiring from isolator to drive and equipment 15Kw, IP 45		Item		
	Carried to Collection				
	Bill No. 18			R	
	MECHANICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<u>Patch Room HVAC installation</u>			
	<i>Supply, installation and commissioning</i>			
	<u>Split unit - IT Patch Room</u>			
112	12 000 BTU Inverter type wall mounted split unit (Unit will be without infrared or motion sensors)	No 1		
113	Refrigeration Piping c/w insulation	m 30		
114	Condensate drain c/w insulation	m 10		
115	Electrical cabling between isolator, indoor and outdoor units	Item		
116	Blue Chem treatment of the condensing units	No 1		
117	Wall mounted brackets	No 2		
	<i>Supply, installation and commissioning</i>			
	<u>Split unit - Security Patch Room</u>			
118	18 000 BTU Inverter type wall mounted split unit (Unit will be without infrared or motion sensors)	No 1		
119	Refrigeration Piping c/w insulation	m 30		
120	Condensate drain c/w insulation	m 10		
121	Electrical cabling between isolator, indoor and outdoor units	Item		
122	Blue Chem treatment of the condensing units	No 1		
123	Wall mounted brackets	No 2		
	<i>Supply, installation and commissioning</i>			
	<u>Split unit - Goods Receiving Office</u>			
124	18 000 BTU Inverter type wall mounted split unit (Unit will be without infrared or motion sensors)	No 1		
125	Refrigeration Piping c/w insulation	m 30		
126	Condensate drain c/w insulation	m 10		
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
127	Electrical cabling between isolator, indoor and outdoor units	Item		
128	Blue Chem treatment of the condensing units	No 1		
129	Wall mounted brackets	No 2		
	<u>VENTILATION</u>			
	<u>Ventilation and Extraction system</u>			
	<u>Ventilation Fans</u>			
	Axial Flow Ventilation Fan			
	c/w galvanised supports and anti-vibration mountings			
130	Axial Fan FA1, Ø500 mm	No 2		
131	Axial Fan FA1, Ø315 mm	No 2		
	<u>Sound Attenuators</u>			
132	Pod attenuator, ø 500 mm x 1000 mm long	No 4		
133	Pod attenuator, ø 315 mm x 600 mm long	No 4		
	<u>Canvas collar</u>			
134	Canvas collar, ø 500 mm	No 4		
135	Canvas collar, ø 315 mm	No 4		
	<u>Tube Ventilation Fans</u>			
136	Tube Fan FT 1, Ø200 mm	No 2		
137	Tube Fan FT 2, Ø200 mm	No 2		
	<u>Wall Fans</u>			
138	Wall Mounted Fan, Ø150	No 3		
	<u>Dampers</u>			
	<u>Ballancing Dampers</u>			
139	Balancing Damper, DA 1 Butterfly, Ø150	No 6		
	Carried to Collection		R	
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No			Quantity	Rate	Amount R
140	Balancing Damper, DA 1 Butterfly, Ø200	No	2		
	<u>Terminals</u>				
	<u>Weather Louvers</u>				
141	Weather Louver 400 x 700 mm , WL1	No	2		
142	Weather Louver 400 x 400 mm, WL 2	No	4		
143	Weather Louver 700 x 1100 mm, WL 3	No	2		
144	Weather louver 250 x 800 mm, WL 4	No	1		
145	Weather Louver 200 x 600 mm, WL 5	No	1		
	<u>Supply Air Louvers</u>				
146	Supply Air Louvers, 45 degree, 250 x 250 mm, SG 1	No	1		
147	Supply Air Louvers, 45 degree, 200 x 200 mm, SG 2	No	1		
148	Supply Air Louvers, 45 degree, 150 x 250 mm, SG 3	No	1		
149	Supply Air Louvers, 45 degree, 300 x 300 mm, SG 4	No	2		
	<u>Extraction Louver</u>				
150	Extraction Louver, 400 x 300 mm, EG 1	No	6		
151	Extraction Louver, 200 x 300 mm, EG 2	No	2		
152	Extraction Louver, 300 x 400 mm, EG 3	No	2		
	<u>Door Grilles</u>				
153	Door Grill, 400 x 400, DG 1	No	3		
154	Door Grill, 300 x 300, DG 2	No	3		
	<u>Disc Valves</u>				
155	Disc valve, Dia 200, DV 02	No	4		
156	Disc valve, Dia 250, DV 03	No	8		
	Carried to Collection				
	Bill No. 18				
	MECHANICAL WORK				
	THE NEW PIER STATE WAREHOUSE FOR SARS				
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				
				R	

D134

Item No		Quantity	Rate	Amount R
	<u>Supply and Return Air Ducting</u>			
	<u>Insulated Ducting and ancillaries including supports and fixings</u>			
	<u>Insulated, Low pressure, galvanized ducting</u>			
157	Galvanized ducting, Category 1	m2	41	
158	Galvanized ducting, Category 2	m2	42	
159	Round Ducting, Dia 150	m	45	
160	Round Ducting, Dia 200	m	58	
	<u>Extra over for fittings (bends, transformations, stop ends, shoes, square to rounds, take-offs, offsets) c/w insulation</u>			
161	Galvanized duct Transformations, Category 1	No	18	
162	Galvanized duct Transformations, Category 2	No	7	
163	Galvanized duct Bend, Category 1	No	6	
164	Galvanized duct Bend, Category 2	No	8	
	<u>Cyclone</u>			
165	Cyclone c/w hopper and collector mounting frame and filters, 2200 l/s @ 700Pa	No	1	
166	Rigging	No	1	
167	Dry air compresor instllation connected to the refers pulse filtration system	No	1	
	<u>Electrical Extraction System</u>			
168	Motor Control Centre c/w instrumentation, locks and switches, switchgear and termination of incoming cable, to house the following switchgear, extraction air-fan, and controls	No	2	
	<u>Electrical Cyclone System</u>			
169	Motor Control Centre c/w instrumentation, locks and switches, switchgear and termination of incoming cable, to house the following switchgear, extraction air fan and controls	No	1	
	Carried to Collection			
	Bill No. 18			
	MECHANICAL WORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No			Quantity	Rate	Amount R
170	Plant room wiring	No	3		
171	Electrical field wiring to all equipment	No	3		
172	To include all cable ways, conduits and supports	No	3		
Carried to Collection Bill No. 18 MECHANICAL WORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN					R

Bill No. 18

MECHANICAL WORK

COLLECTION PAGE

Total Brought Forward from Page No.

**Page
No****Amount
R**

177

Total Brought Forward from Page No.

178

Total Brought Forward from Page No.

179

Total Brought Forward from Page No.

180

Total Brought Forward from Page No.

181

Total Brought Forward from Page No.

182

Total Brought Forward from Page No.

183

Total Brought Forward from Page No.

184

Total Brought Forward from Page No.

185

Total Brought Forward from Page No.

186

Total Brought Forward from Page No.

187

Total Brought Forward from Page No.

188

Total Brought Forward from Page No.

189

Total Brought Forward from Page No.

190

Total Brought Forward from Page No.

191

Total Brought Forward from Page No.

192

Total Brought Forward from Page No.

193

TOTAL CARRIED TO FINAL SUMMARY

R

Bill No. 18

MECHANICAL WORK

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

Item No		Quantity	Rate	Amount R
	<p><u>BILL NO 19</u></p> <p><u>PAINTWORK</u></p> <p>The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>DESCRIPTIONS</u></p> <p>Descriptions of paintwork shall be deemed to include for all cutting in</p> <p><u>PREPARATORY WORK TO EXISTING WORK</u></p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Previously painted metal surfaces</p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>Carried to Collection Bill No. 19 PAINTWORK THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

Item No		Quantity	Rate	Amount R
	<u>PAINT SPECIFICATIONS</u>			
	<u>PAINTWORK, ETC TO NEW WORK ON</u>			
	<u>FLOATED PLASTER SURFACES WITH</u>			
	<u>One coat "Dulux Trade Alkali Resistant Primer" and two coats "Dulux Acrylic PVA"</u>			
1	On internal walls	m2	5 414	
	<u>One coat Professional Plaster Primer and two coats Plascon Velvagio Polyurethane enamel paint on:</u>			
2	On ceilings	m2	808	
	<u>One coat 'Professional Plaster Primer (PP700)' and two coats "Plascon Wall and All" Pure Acrylic PVA</u>			
3	On external walls	m2	2 368	
	<u>WOOD SURFACES WITH</u>			
	<u>One coat oil wood primer, one coat universal undercoat and two coats polyurethane enamel paint on</u>			
4	Doors	m2	30	
	<u>PLASTER BOARD SURFACES WITH</u>			
	<u>One coat Professional Plaster Primer and two coats Plascon Velvagio Polyurethane enamel paint on:</u>			
5	Ceilings and cornices	m2	72	
	<u>One coat Crown PVA primer and two coats Plascon Professional low sheen white PVA paint on:</u>			
6	Bulkheads	m2	34	
	<u>ON METAL</u>			
	<u>One coat calcium plumbate primer on galvanised steel</u>			
7	Backs of frames, linings, etc not exceeding 300mm wide	m	115	
	Carried to Collection			
	Bill No. 19			
	PAINTWORK			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Bill No. 19

PAINTWORK

COLLECTION PAGE**Page
No****Amount
R**

Total Brought Forward from Page No.

195

Total Brought Forward from Page No.

196

TOTAL CARRIED TO FINAL SUMMARY

Bill No. 19

PAINTWORK

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

R

Item No		Quantity	Rate	Amount R
	<u>BILL NO 20</u>			
	<u>PROVISIONAL SUMS ETC</u>			
	The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>General</u>			
	Unless otherwise described, all prime cost amounts and provisional sums exclude the cash discount of 5% and include for delivery to site of all articles concerned			
	All prime cost amounts and provisional sums are net and include for delivery to site of all articles concerned			
	<u>Preliminaries</u>			
	The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"			
	<u>LIGHTNING PROTECTION AND EARTHING SYSTEM</u>			
1	Provide an amount of R 120 000.00 (One Hundred and Twenty Thousand Rand) for lightning protection and earthing systems by a specialist	Item		120 000 00
2	Profit on above item	Item		
3	Attendance on ditto	Item		
	<u>DIESEL STANDBY GENERATOR</u>			
4	Provide an amount of R 520 000.00 (Five Hundred and Twenty Thousand Rand) for diesel general to electrical engineers specification to be supplied and installed by a specialist	Item		520 000 00
5	Profit on above item	Item		
6	Attendance on ditto	Item		
	Carried to Collection		R	
	Bill No. 20			
	PROVISIONAL SUMS			
	THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>FUEL / DIESEL STORAGE TANK INCLUDING MAINTENANCE</u>			
7	Provide an amount of R 20 000.00 (Twenty Thousand Rand) for diesel storage tank including 12 months maintenance by a specialist	Item		20 000 00
8	Profit on above item	Item		
9	Attendance on ditto	Item		
	<u>STEEL STAIRCASES</u>			
10	Provide an amount of R 200 000.00 (Two Hundred Thousand Rand) for desing and installation of steel stairs by a specialist	Item		200 000 00
11	Profit on above item	Item		
12	Attendance on ditto	Item		
	<u>BUDGETARY ALLOWANCES</u>			
13	Allow an amount of R150 000.00 (One Hundred and Fifty Thousand Rand) for refurbishment of existing steel roof canopies	Item		150 000 00
14	Allow an amount of R15 000.00 (Fifteen Thousand Rand) for connection of sprinkler water pipework to municipal mains	Item		15 000 00
15	Allow an amount of R50 000.00 (Fifty Thousand Rand) for builders work in connection with dock levellers	Item		50 000 00
16	Allow an amount of R60 000.00 (Sixty Thousand Rand) for builders work in connection plumbing and drainage installation	Item		60 000 00
17	Allow an amount of R100 000.00 (One Hundred Thousand Rand) for detail design	Item		100 000 00
18	Allow an amount of R150 000.00 (One Hundred and Fifty Thousand Rand) for all signage including road markings, etc	Item		150 000 00
	Carried to Collection		R	
	Bill No. 20			
	PROVISIONAL SUMS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Bill No. 20				
PROVISIONAL SUMS				
<u>COLLECTION PAGE</u>				
Total Brought Forward from Page No.	Page No		Amount R	
	198			
Total Brought Forward from Page No.	199			
TOTAL CARRIED TO FINAL SUMMARY		R		
Bill No. 20				
PROVISIONAL SUMS				
THE NEW PIER STATE WAREHOUSE FOR SARS				
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

<u>SECTION SUMMARY - Building Works</u>				
Bill No		Page No		Amount R
1	ALTERATIONS	101		
2	EARTHWORKS	105		
3	CONCRETE, FORMWORK AND REINFORCEMENT	110		
4	PILING	114		
5	MASONRY	118		
6	WATERPROOFING	119		
7	ROOF COVERINGS, ETC	122		
8	CARPENTRY AND JOINERY	127		
9	CEILINGS PARTITIONS AND ACCESS FLOORING	130		
10	FLOOR COVERINGS	135		
11	IRONMONGERY	139		
12	STRUCTURAL STEELWORK	142		
13	METALWORK	152		
14	PLASTERING	155		
15	TILING	158		
16	PLUMBING AND DRAINAGE	165		
17	ELECTRICAL WORK	176		
18	MECHANICAL WORK	194		
19	PAINTWORK	197		
20	PROVISIONAL SUMS	200		
Carried to Final Summary			R	
THE NEW PIER STATE WAREHOUSE FOR SARS				
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN				

Item No		Quantity	Rate	Amount R
	<p><u>SECTION 3</u></p> <p><u>BILL NO 1</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant Clauses in the Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in these Bills of Quantities.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions and Preambles</u></p> <p>The full descriptions of the items and all preambles in the previous and following trades, shall, unless otherwise stated, also be applicable to the relevant items in this trade.</p> <p><u>View site</u></p> <p>Before submitting this 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> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated.</p> <p><u>GENERAL</u></p> <p><u>Site clearance:</u></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth.	m2	8 957	
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>EXTERNAL WORKS</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

Item No		Quantity	Rate	Amount R
	<u>REMOVAL OF TREES ETC</u>			
	<u>Cutting down and removing, grubbing up roots and filling in holes</u>			
2	Trees with stump not exceeding 500mm diameter	No 1		
3	Trees with stump not exceeding 1000mm diameter	No 2		
	<u>BULK EXCAVATION, FILLING, ETC</u>			
	<u>Open face excavation in earth not exceeding 2m deep to reduce levels under paved areas</u>			
4	Open face excavation	m3 4 586		
	<u>Extra over bulk excavation in earth for breaking down and removal of</u>			
5	Premix approximately 90mm thick	m2 4 974		
6	Reinforced concrete paving approximately 250mm thick	m2 2		
	<u>Extra over all excavations for carting away</u>			
7	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3 4 586		
	<u>Keeping excavations free of water</u>			
8	Allow for keeping excavations entirely free from water and mud	Item		
	<u>ROADS AND PARKING CONSTRUCTION</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Testing of material and filling:</u>			
	Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series.			
	<u>Keeping excavations free of water:</u>			
9	Keeping excavations free of water other than subterranean water.	Item		
	Carried to Collection		R	
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

D134

Item No		Quantity	Rate	Amount R
	<u>Earth filling, etc., under roads:</u>			
10	Rip, scarify as necessary and compact natural ground or excavated surfaces for a depth of 150mm to a density of at least 98% Mod. AASHTO to minimum G9 quality maximum density.	m2	4 616	
11	Construct 300mm thick base layer of G2 crusher run obtained from commercial sources, compacted in layers not exceeding 150mm thick to a density of at least 98% Mod. AASHTO density .	m3	1 385	
12	50mm Thick course river sand supplied by the contractor	m3	25	
13	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	500	
	<u>Additional tests required by the engineer:</u>			
14	Modified AASHTO density test.	No	5	
15	Natural california bearing ratio test.	No	3	
16	Road indicator test.	No	8	
17	Field density test including optimum moisture content for reducing per test.	No	5	
	<u>Bituminous premix road surfacing:</u>			
18	Primer coat bituminous primer road surfacing MSP 1 to crusher run base course.	m2	4 008	
19	25mm thick premix wearing course (13.2mm).	m2	1 603	
20	30mm thick premix wearing course (13.2mm).	m2	2 405	
	<u>Concrete Paved Areas</u>			
	<u>25MPa/19mm reinforced concrete:</u>			
21	200mm Thick paving laid against excavated surfaces	m3	100	
22	Edging to Kerbs	m3	13	
	Carried to Collection			
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<u>Rough formwork to sides</u>			
23	Surface beds not exceeding 300mm high	m	165	
24	Kerb foundation not exceeding 300mm high	m	433	
	<u>Finishing top surfaces of concrete with a wood float:</u>			
25	Edging to kerbs, etc. not exceeding 300mm wide.	m2	43	
	<u>Reinforcement</u>			
26	Type 245 fabric reinforcement in concrete surface beds, slabs, etc	m2	500	
27	Various diameters	t	18.00	
	<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
28	Under surface beds	m2	500	
	<u>Two-part grey polysulphide sealing compound, including backing cord, bond breaker, primer, etc.:</u>			
29	4 x 25mm In saw - cut joints.	m	228	
30	6mm Construction joints	m	61	
31	12mm Isolation joints	m	96	
	<u>Saw-cut joints:</u>			
32	4 x 25 mm Saw - cut joints in top of concrete.	m	228	
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces:</u>			
33	6mm Joints not exceeding 300mm high.	m	61	
	<u>Isolation joints with bitumen impregnated softboard between vertical concrete and brick surfaces:</u>			
34	12mm Joints exceeding 300mm high	m2	19	
	Carried to Collection			
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

Item No		Quantity	Rate	Amount R
	<u>Precast concrete finished smooth on exposed surfaces, including bedding, jointing and pointing:</u>			
35	150 x 250mm high Fig. 6 Kerb on 20mm thick mortar (1:3) bed with 150 x 100mm splayed continuous haunch behind including all necessary excavations, filling, backfilling and disposing of excess material.	m	433	
	<u>PRECAST CONCRETE PAVERS</u>			
	<u>Vibro 25 Mpa Industrial Interlock concrete paver colour Grey (Code: INDINT2), size 220 x 100 x 80mm thick, manufactured in accordance with SANS 1058:2012, laid in herringbone pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, with a minimum longitudinal fall of 1% on a transverse fall of at least 2% on 25mm compacted sand bed with fine jointing sand swept and vibrated into joints, all laid on subgrade conforming to SANS 1200 D Degree Of Accuracy I. Paving to be inspected and re-sanded after three months.</u>			
36	80mm Thick pavers	m2	108	
37	220mm Boarder paver to herring bone patterned paving	m	96	
	<u>BOLLARDS, ETC</u>			
38	"Turnstar" or similar approved 304 grade stainless steel finished Fixed bollard, overall size 127mm diameter x 800mm high with fishtail fixing lugs cast into 500 x 500 x 500mm deep concrete base all in accordance with the manufacturer's recommendations.	No	20	
	<u>STORMWATER DRAINAGE</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>uPVC pipes and fittings:</u>			
	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.			
	Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings.			
	Carried to Collection		R	
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.</p> <p>Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.</p> <p><u>Reducing fittings:</u></p> <p>Where fittings have reducing ends or branches they are described as 'reducing' and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained.</p> <p><u>Fixing of pipes:</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level.</p> <p><u>Disinfection of water pipework:</u></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere).</p> <p><u>Laying, backfilling, bedding, etc., of pipes:</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.</p>			
	<p>Carried to Collection</p> <p>Bill No. 1</p> <p>EXTERNAL WORKS</p> <p>THE NEW PIER STATE WAREHOUSE FOR SARS</p> <p>GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

Item No		Quantity	Rate	Amount R
	<p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:</p> <p>SABS 1200L : Medium-pressure pipelines SABS 1200 LD : Sewers SABS 1200 LE : Stormwater drainage</p> <p>Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)</p> <p>Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)</p> <p>Unless otherwise described bedding of rigid pipes shall be Class B bedding</p> <p><u>General:</u></p> <p>Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 98% Mod AASHTO density and disposal of surplus material on site.</p> <p><u>As-built drawings:</u></p> <p>Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere).</p> <p><u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for 300mm diameter pipes:</u></p>			
39	For depths exceeding 1m and not exceeding 2m.	m	21	
	<p><u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for 450mm diameter pipes:</u></p>			
40	For depths exceeding 1m and not exceeding 2m.	m	464	
41	For depths exceeding 2m and not exceeding 3m.	m	250	
	<p>Carried to Collection Bill No. 1 EXTERNAL WORKS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>		R	

D134

Item No		Quantity	Rate	Amount R
	<u>Extra over excavation in earth for excavation in:</u>			
42	Extra over item above for intermediate material.	m	377	
	<u>Provision of bedding from trench excavation:</u>			
43	Selected fill material.	m3	127	
	<u>Supply of bedding material from commercial sources including haulage:</u>			
44	Class B bedding material for 300mm diameter pipes.	m3	2	
45	Class B bedding material for 450mm diameter pipes.	m3	40	
	<u>Supply, lay and bed pipes complete non-pressure pipes with couplings:</u>			
46	300mm Diameter concrete with spigot and socket joint Class 100D.	m	21	
47	450mm Diameter concrete with spigot and socket joint Class 100D.	m	357	
	<u>Supply and install manholes,catchpits, grid inlets, etc.:</u>			
48	Grid Inlet size 600 x 900 mm wide and not exceeding 2000mm deep internally, complete including all necessary excavations, filling and back filling, blinding layer of concrete, reinforced concrete surface bed, brick walls, reinforced concrete slab, oil separator pipes, opening for and including Besaans & Du Plessiss Ref 2898C stormwater grating and frame.	No	25	
	<u>Gratings, covers and frames:</u>			
49	450 x 600mm x 99,5kg cast iron dished grating and frame.	No	25	
	<u>Connection to Municipal mains:</u>			
50	Allow for connection of stormwater drainage system to Municipality mains.	Item		
	<u>Testing:</u>			
51	Allow for testing of the entire stormwater drainage system to Engineer's satisfaction.	Item		
	Carried to Collection			
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Item No		Quantity	Rate	Amount R
	<p><u>SOIL DRAINAGE</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.</p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings.</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.</p> <p>Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.</p> <p><u>Reducing fittings:</u></p> <p>Where fittings have reducing ends or branches they are described as 'reducing' and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained.</p> <p><u>Fixing of pipes:</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level.</p> <p><u>Disinfection of water pipework:</u></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere).</p> <p><u>Laying, backfilling, bedding, etc., of pipes:</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.</p> <p>Carried to Collection Bill No. 1 EXTERNAL WORKS THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN</p>			
			R	

D134

Item No		Quantity	Rate	Amount R
	<p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:</p> <p>SABS 1200L : Medium-pressure pipelines SABS 1200 LD : Sewers SABS 1200 LE : Stormwater drainage</p> <p>Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)</p> <p>Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)</p> <p>Unless otherwise described bedding of rigid pipes shall be Class B bedding</p> <p><u>General:</u></p> <p>Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 98% Mod AASHTO density and disposal of surplus material on site.</p> <p><u>As-built drawings:</u></p> <p>Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere).</p> <p><u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for 150mm diameter pipes:</u></p>			
52	For depths exceeding 1m and not exceeding 2m.	m	129	
53	For depths exceeding 2m and not exceeding 3m.	m	301	
	<u>Extra over excavation in earth for excavation in:</u>			
54	Extra over item above for intermediate material.	m	429	
	Carried to Collection			
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			
			R	

D134

[illegible]

D134

Item No		Quantity	Rate	Amount R
	<u>Supply and install manholes,catchpits, grid inlets, etc.:</u>			
	<u>Inspection chambers, manholes, etc. complete a including covers, channels, excavations bacfilling, etc</u>			
62	Excavate for and construct 1020mm internal diameter circular precast manhole exceeding 750mm but not exceeding 1000mm deep with light duty circular precast concrete cover and frame, 150 mm thick x 1020 mm thick unreinforced concrete grade 25/19 base, benching and including all risk of collapse and backfilling etc on completion	No	4	
63	Excavate for and construct 750mm internal diameter circular precast manhole exceeding 1750mm but not exceeding 2000mm deep with light duty circular precast concrete cover and frame, 150 mm thick x 1020 mm thick unreinforced concrete grade 25/19 base, benching and including all risk of collapse and backfilling etc on completion	No	8	
	<u>Sundries</u>			
64	300 x 300 x 300mm Precast concrete inspection eye marker slab set in ground	No	12	
	<u>Gratings, covers and frames:</u>			
65	450 x 600mm x 99,5kg cast iron dished grating and frame.	No	12	
	<u>Connection to Municipal mains:</u>			
66	Allow for connection of soil drainage system to Municipality mains.		Item	
	<u>Testing:</u>			
67	Allow for testing of the entire soil drainage system to Engineer's satisfaction.		Item	
	Carried to Collection			
	Bill No. 1			
	EXTERNAL WORKS			
	THE NEW PIER STATE WAREHOUSE FOR SARS			
	GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			

Bill No. 1

EXTERNAL WORKS

COLLECTION PAGE

Total Brought Forward from Page No.

**Page
No****Amount
R**

202

Total Brought Forward from Page No.

203

Total Brought Forward from Page No.

204

Total Brought Forward from Page No.

205

Total Brought Forward from Page No.

206

Total Brought Forward from Page No.

207

Total Brought Forward from Page No.

208

Total Brought Forward from Page No.

209

Total Brought Forward from Page No.

210

Total Brought Forward from Page No.

211

Total Brought Forward from Page No.

212

Total Brought Forward from Page No.

213

Carried to Final Summary

R

Bill No. 1

EXTERNAL WORKS

**THE NEW PIER STATE WAREHOUSE FOR SARS
GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN**

<u>FINAL SUMMARY</u>		Page No	Amount R
1	Preliminaries	93	
2	Building Works	201	
3	External Works	214	
Sub Total			R
<u>CONTINGENCY AMOUNT</u>			
Provide an amount for contingencies equal to 15% of the total of preliminaries, building works and external works, all to be used wholly or partly as directed and approved by the Client		Item	
Sub Total			R
ADD 14% VAT			R
TOTAL CARRIED TO FORM OF TENDER			R
THE NEW PIER STATE WAREHOUSE FOR SARS GATE 5 BAYHEAD ROAD, BAYHEAD IN DURBAN			