

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.1</u></p> <p><u>BILL NO.1</u></p> <p><u>PRELIMINARIES</u></p> <p><u>NOTES</u></p> <p>The agreement is to be the JBCC Series 2000 Principal Building Agreement prepared by the Joint Building Contracts Committee, Edition 4.1, March 2005.</p> <p>The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, code 2103, May 2005, and shall be deemed to be incorporated herein.</p> <p>Tenderers are referred to the above mentioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary.</p> <p>Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or supplements as will apply are given under each relevant clause heading.</p> <p>Where any item is not relevant to this specific contract, such item is marked N/A (signifying "Not Applicable").</p> <p style="text-align: center;">Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			

If Alternative A as set out in clause 10.2 & 3 hereinafter is to be used for the adjustment of the preliminaries, the preliminaries, each item priced is to be allocated to one or more of the three categories by insertion of "F", "V", "T" as the case may be against the price in the "rate" column immediately preceding the "amount" column the tendered amount for the Preliminaries must be allocated to one or more of the following three categories where : "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value, and "T" denotes an amount proportionate to time.

SECTION A: PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1/1/1 Definitions and interpretation (Clause 1).

F:..... V:..... T:.....

Item

Objective (A2)

1/1/2 Offer and acceptance and performance (Clause 2).

F:..... V:..... T:.....

Item

Preparation (A3 - A14)

1/1/3 Documents (Clause 3).

F:..... V:..... T:.....

Item

1/1/4 Design responsibility (Clause 4).

F:..... V:..... T:.....

Item

1/1/5 Employer's agents (Clause 5).

F:..... V:..... T:.....

Item

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/6	<p>Site representative (Clause 6).</p> <p>Prior to the award of the contract, tenderers shall submit, upon request, the names of the proposed senior management personnel to be responsible for the supervision and administration of the works.</p> <p>Prior to the date of commencement of the works the contractor shall nominate senior site personnel to whom instructions may be issued.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/7	<p>Compliance with regulation (Clause 7).</p> <p>A Health and Safety Specification is attached for pricing in Section No.13.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/8	<p>Works risk (Clause 8).</p>	Item		
1/1/9	<p>Indemnities (Clause 9).</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/10	<p>Works insurances (Clause 10).</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/11	<p>Liability insurances (Clause 11).</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/12	<p>Effecting insurances (Clause 12).</p> <p>F:..... V:..... T:.....</p>	Item		
Carried to Trade Summary				R
<p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/13	No Clause (Clause 13). F:.....V:..... T:.....	Item		
1/1/14	Security (Clause 14). F:.....V:..... T:.....	Item		
	<u>Execution (A15 - A23)</u>			
1/1/15	Preparation for and execution of the works (Clause 15). F:.....V:..... T:.....	Item		
1/1/16	Access to the works (Clause 16). F:.....V:..... T:.....	Item		
1/1/17	Contract instructions (Clause 17). F:.....V:..... T:.....	Item		
1/1/18	Setting out of the works (Clause 18). The contractor shall notify the Architect if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc., exist in order that the necessary arrangements may be made for the rectification of any such encroachments. F:.....V:..... T:.....	Item		
1/1/19	Assignment (Clause 19). F:.....V:..... T:.....	Item		
	Carried to Trade Summary		R	
	PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/20	Nominated subcontractors (Clause 20). F:.....V:..... T:.....	Item		
1/1/21	Selected subcontractors (Clause 21). F:.....V:..... T:.....	Item		
1/1/22	Employer's direct contractors (Clause 22). F:.....V:..... T:.....	Item		
1/1/23	Contractor's domestic subcontractors (Clause 23). F:.....V:..... T:.....	Item		
<u>Completion (A24- A30)</u>				
1/1/24	Practical completion (Clause 24). F:.....V:..... T:.....	Item		
1/1/25	Works completion (Clause 25). F:.....V:..... T:.....	Item		
1/1/26	Final completion (Clause 26). F:.....V:..... T:.....	Item		
1/1/27	Latent defects liability period (Clause 27). F:.....V:..... T:.....	Item		
1/1/28	Sectional completion (Clause 28). F:.....V:..... T:.....	Item		
Carried to Trade Summary				R
PRELIMINARIES Bill No. 1 PRELIMINARIES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/29	Revision for date of practical completion (Clause 29). F:.....V:..... T:.....	Item		
1/1/30	Penalty for non-completion (Clause 30). F:.....V:..... T:.....			
<u>Payment (A31 - A35)</u>				
1/1/31	Interim payment to the contractor (Clause 31). Notwithstanding this or any other clause materials and goods stored off site shall not be included in the amount authorised for payment. Clause 31.6.5 shall be deemed to be deleted. F:.....V:..... T:.....	Item		
1/1/32	Adjustment to the contract value (Clause 32). Notwithstanding the provisions of clause 32.13 or any other clause all fluctuations in costs shall be for the account of the contractor. See also clause 42.4.6. F:.....V:..... T:.....			
1/1/33	Recovery of expense and loss (Clause 33). F:.....V:..... T:.....	Item		
1/1/34	Final account and final payment (Clause 34). F:.....V:..... T:.....	Item		
1/1/35	Payment to other parties (Clause 35). F:.....V:..... T:.....	Item		
Carried to Trade Summary				
PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Cancellation (A36 - A39)</u>			
1/1/36	Cancellation by Employer - Contractor's default (Clause 36). F:.....V:..... T:.....		Item	
1/1/37	Cancellation by Employer - Loss and damage (Clause 37). F:.....V:..... T:.....		Item	
1/1/38	Cancellation by Contractor - Employer's default (Clause 38). F:.....V:..... T:.....		Item	
1/1/39	Cancellation - Cessation of the works (Clause 39). F:.....V:..... T:.....		Item	
	<u>Dispute (A40)</u>			
1/1/40	Dispute settlement (Clause 40). F:.....V:..... T:.....		Item	
	<u>State Provisions (A41)</u>			
1/1/41	State Substitutions (Clause 41). F:.....V:..... T:.....		Item	
	<u>Schedule (A42)</u>			
1/1/42	Pre-Tender information (Clause 42). F:.....V:..... T:.....		Item	
	Carried to Trade Summary		R	
	PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

<p><u>CONTRACTING AND OTHER PARTIES</u></p> <p>42.1.1 Employer: Department of Health, Northern Province Province</p> <p>Postal Address: Not Applicable</p> <p>Domicilium: 4 Lyndhurst Street Belgravia Kimberly 8301</p> <p>42.1.2 Agent's Service: Project Manager</p> <p>Agent (1): Dark Horse Projects & Investment Group</p> <p>Postal Address: 4 Lyndhurst Street Belgravia Kimberly 8301</p> <p>Telephone: 079 777 6005</p> <p>Fax: N/A</p> <p>e-mail: admin@darkhorseprojects.co.za</p>			
<p><u>42.2 CONTRACT DETAILS</u></p> <p>42.2.1 Works Description:</p> <p>Major Refurbishments and Additions to existing Galeshewe Day Hospital.</p> <p>42.2.2 Site Description :</p> <p>The site is situated at the existing premises of Galeshewe Day Hospital in Kimberly.</p> <p>42.2.3 Work or Installation by Direct Contractors: (None)</p>			R

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

42.2.4 This Agreement is for a State Contract : (Yes)
Payment will be made for materials and goods on site: (Yes)
Dispute resolution method (arbitration)

42.2.5 Contract period: 24 Calender months including RSA holidays as well as builder's holidays

42.2.6 Period for the commencement of the works after the contractor takes possession of the site: 7 working days.

42.2.7 Completions in sections are required: No

42.2.8 Intended date of practical completion and the penalty per calendar day for the works as a whole:
Date: 24 Calendar months after contract commencement including builders holidays
Penalty: 1.25 cents per R100 of construction amount per Calendar Day (R 32 000.00 per Calendar Day).

Intended dates of practical completion where section completion is required and the penalty per calendar day for the works in sections: N/A

42.2.9 Arbitration rules as recommended by Association of Arbitrators (SA) : (Yes)
Law applicable: Republic of South Africa

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

42.3 INSURANCES

42.3.1 Contract works insurance to be effected by the :

CONTRACTOR

For the amount of: CONTRACT VALUE +
20%

With a deductible of: R 5 000.00

42.3.2 Supplementary insurance required (Yes)

42.3.3 Public liability insurance to be effected by the

CONTRACTOR

For the amount of: R 10 000 000.00

With a deductible of: R nil

42.4 DOCUMENTS

42.4.1 Waiver of the contractor's lien or right of continuing possession is required: (Yes)

42.4.2 Number of construction document copies to be supplied free of charge: 3 (THREE)

42.4.3 This document is drawn up in accordance with the ASAQS Standard System of Measuring Building Work: (YES) Sixth Edition, revised in February 1999.

42.4.4 Number of days for submission of priced documents:

Priced bills of quantities to be submitted with tender.

42.4.5 JBCC Engineering General Conditions are to be included in the documents: (No)

42.4.6 The contract value to be adjusted using CPAP: (YES)

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

	42.4.7 Details of changes made to the provisions of JBCC standard documentation: (As stated)			
<u>SECTION B: PRELIMINARIES</u>				
<u>Definitions (B1):</u>				
1/1/43	Definitions and interpretation (B1)			
	F:..... V:..... T:.....	Item		
<u>Documents (B2):</u>				
1/1/44	Checking of documents (B2.1)			
	These Bills of Quantities contain pages and annexures as indexed.			
	The items in these Bills of Quantities are to be read and priced in conjunction with, and the descriptions regarded as amplified by the Model Preambles for Trades as recommended and published by the Association of South African Quantity Surveyors, 2009 edition, and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained.			
	F:..... V:..... T:.....	Item		
1/1/45	Provisional Bills of Quantities (B2.2)			
	The Quantities are Provisional (NO)			
	F:..... V:..... T:.....	Item		
1/1/46	Availability of construction documentation (B2.3)			
	F:..... V:..... T:.....	Item		
1/1/47	Interests of Agents (B2.4)			
	F:..... V:..... T:.....	Item		
1/1/48	Priced documents (B2.5)			
	F:..... V:..... T:.....	Item		
<u>Carried to Trade Summary</u>				
PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				
R				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/49	<p>Tender submission (B2.6)</p> <p>Notwithstanding anything contained in this clause tenders shall be valid for a period of 90 days from the closing date of tenders.</p> <p>F:..... V:..... T:.....</p> <p><u>The Site (B3)</u></p>	Item		
1/1/50	<p>Defined works area (B3.1)</p> <p>As per Architect's drawings. See site plan.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/51	<p>Geotechnical investigation (B3.2)</p> <p>(Please see attached Geotechnical Investigation Report.)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/52	<p>Inspection of the Site (B3.3)</p> <p>No claims for extras arising from the contractor having failed to comply with this clause will be entertained.</p> <p>A compulsory, site clarification meeting will be held at the proposed site as per the tender document attached herewith</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/53	<p>Existing premises occupied (B3.4) (YES)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/54	<p>Previous work - dimensional accuracy (B3.5)</p> <p>F:..... V:..... T:.....</p>	Item		
	<u>Carried to Trade Summary</u>		R	
	<p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

1/1/55	Previous work - defects (B3.6) F:.....V:..... T:.....	Item		
1/1/56	Services - known (B3.7) Existing services and points of connection are known and will be pointed out on site by the Architect. F:.....V:..... T:.....	Item		
1/1/57	Services - unknown (B3.8) F:.....V:..... T:.....	Item		
1/1/58	Protection of trees (B3.9) F:.....V:..... T:.....	Item		
1/1/59	Articles of value (B3.10) F:.....V:..... T:.....	Item		
1/1/60	Inspection of adjoining properties (B3.11) F:.....V:..... T:.....	Item		
<u>Management of contract (B4)</u>				
1/1/61	Management of the Works (B4.1) F:.....V:..... T:.....	Item		
Carried to Trade Summary				
PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/62	<p>Programme for the Works (B4.2)</p> <p>Added to the provisions in (B4.2), the contractor shall ensure that he/she has suitable staff to programme the works using suitable and recognised programming software and the programme for the work is to be developed in sufficient detail indicating an activity network with early and late start dates, early and late finish dates and duration for each activity, further each activity is to be linked and the critical path indicated. Furthermore, the programming of the works shall include detailed documentation and information required schedule which indicates latest dates by which information is required in order to achieve programme dates.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/63	<p>Progress meetings (B4.3)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/64	<p>Technical meetings (B4.4)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/65	<p>Labour and plant records (B4.5)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/66	<p><u>Samples and shop drawings (B5)</u></p> <p>Samples of materials (B5.1)</p> <p>F:..... V:..... T:.....</p>	Item		
	<p>Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>		R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/67	Workmanship samples (B5.2) F:.....V:..... T:.....	Item		
1/1/68	Shop drawings (B5.3) F:.....V:..... T:.....	Item		
1/1/69	Compliance with manufacturer's instructions (B5.4) <u>Temporary works and plant (B6)</u>	Item		
1/1/70	Deposits and fees (B6.1) F:.....V:..... T:.....	Item		
1/1/71	Enclosure of the works (B6.2) No access to public shall be allowed on site at all times and strict access control shall be maintained during the construction period. The contractor shall fully enclose the works by providing a 2m high diamond mesh fence or suitably similar and approved including access gates, posts. The fence shall be maintained throughout the contract and removed on completion of the contract. F:.....V:..... T:.....	Item		
1/1/72	Advertising (B6.3) F:.....V:..... T:.....	Item		
1/1/73	Plant, equipment, sheds and offices (B6.4) F:.....V:..... T:.....	Item		
Carried to Trade Summary			R	
<p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/74	Office accommodation for meetings held on the site which shall be kept clean and fit for use at all times (B6.4.3) F:..... V:..... T:.....	Item		
1/1/75	Main notice board (B6.5) F:..... V:..... T:.....	Item		
1/1/76	Subcontractors notice board (B6.6) F:..... V:..... T:.....	Item		
	<u>Temporary Services (B7)</u>			
1/1/77	Location (B7.1) F:..... V:..... T:.....	Item		
1/1/78	Water (B7.2) Alternative chosen: A F:..... V:..... T:.....	Item		
1/1/79	Electricity (B7.3) Alternative chosen: A F:..... V:..... T:.....	Item		
	Carried to Trade Summary		R	
	PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/80	Telecommunication equipment (B7.4) F:.....V:..... T:.....	Item		
1/1/81	Ablution facilities (B7.5) Alternative chosen: A F:.....V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
1/1/82	Responsibility for prime cost amounts (B8.1) F:.....V:..... T:.....	Item		
	<u>Attendance on Nominated/Selected Subcontractors (B9)</u>			
1/1/83	General Attendance (B9.1) F:.....V:..... T:.....	Item		
1/1/84	Special Attendance (B9.2) F:.....V:..... T:.....	Item		
1/1/85	Commissioning - fuel, water and power (B9.3) F:.....V:..... T:.....	Item		
	<u>Financial Aspects (B10)</u>			
1/1/86	Statutory taxes, duties and levies (B10.1) F:.....V:..... T:.....	Item		
1/1/87	Payment of Preliminaries (B10.2) F:.....V:..... T:.....	Item		
	Carried to Trade Summary		R	
	PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/88	Adjustment of Preliminaries (B10.3) F:.....V:..... T:.....	Item		
1/1/89	Payment certificate cash flow (B10.4) F:.....V:..... T:.....	Item		
<u>General (B11)</u>				
1/1/90	Protection of the Works (B11.1) F:.....V:..... T:.....	Item		
1/1/91	Protection/isolation of existing/sectionally occupied works (B11.2) F:.....V:..... T:.....	Item		
1/1/92	Site security (B11.3) F:.....V:..... T:.....	Item		
1/1/93	Notice before covering work (B11.4) F:.....V:..... T:.....	Item		
1/1/94	Disturbance (B11.5) F:.....V:..... T:.....	Item		
1/1/95	Environmental disturbance (B11.6) F:.....V:..... T:.....	Item		
1/1/96	Works cleaning and clearing (B11.7) F:.....V:..... T:.....	Item		
Carried to Trade Summary				
PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/97	Vermin (B11.8) F:.....V:..... T:.....	Item		
1/1/98	Overhand work (B11.9) F:.....V:..... T:.....	Item		
1/1/99	Instruction manuals (B11.10) F:.....V:..... T:.....	Item		
1/1/100	As built information (B11.11) F:.....V:..... T:.....	Item		
1/1/101	Tenant installations (B11.12) F:.....V:..... T:.....	Item		
<u>Schedule of Variables (B12)</u>				
1/1/102	Pre-tender information (B12.1) Information necessary for making choices 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 either no details or specific requirements are available or that the clause is irrelevant for this specific contract. The provisions of the Occupational Health Safety Act 1985, the Construction Regulations 2003 and the Project Occupational Health and Safety Specification apply in full to this contract and relevant items and variables listed hereunder. Rates for the respective items are to reflect this.	Item		
	12.1.1 Provisional Bills of Quantities (B2.2) The quantities are provisional (NO).			
	Carried to Trade Summary		R	
PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

<p>12.1.2 Availability of Construction documentation (B2.3) Construction documentation is complete (Yes).</p> <p>12.1.3 Interests of Agents (B2.4) (None).</p> <p>12.1.4 Defined works area (B3.1) As per Architects' drawings See site plan</p> <p>12.1.5 Geotechnical investigation (B3.2)</p> <p>12.1.6 Existing premises occupied (B3.4) (NO)</p> <p>12.1.7 Previous work - dimensional accuracy (B3.5)</p> <p>12.1.8 Previous work - defects (B3.6)</p> <p>12.1.9 Services - known (B3.7) Existing services and points of connection are known and will be pointed out on site by the principal agent.</p> <p>12.1.10 Protection of trees (B3.9)</p> <p>12.1.11 Inspection of adjoining properties (B3.11)</p> <p>12.1.12 Enclosure of the works (B6.2)</p> <p>12.1.13 Offices (B6.4.3)</p> <p>12.1.14 Main notice board (B6.5) One main notice board IS required.</p> <p>12.1.15 Subcontractors Notice Board (B6.6) A SC Notice Board is NOT required.</p>	<p>R</p>
<p>Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

<p>12.1.16 Water (B7.2)</p> <p>Alternative chosen: A</p> <p>12.1.17 Electricity (B7.3)</p> <p>Alternative chosen: A</p> <p>12.1.18 Telecommunications (B7.4)</p> <p>The contractor shall provide telecommunication facilities as stated in the schedule and shall be entitled to recover usage costs from the users thereof.</p> <p>12.1.19 Ablution facilities (B7.5)</p> <p>Alternative chosen: A</p> <p>12.1.20 Protection of existing/sectionally occupied works (B11.2)</p> <p>Protection is required (No)</p> <p>12.1.21 Special Attendance (B9.2)</p> <p>12.1.22 Protection of the Works (B11.1)</p> <p>12.1.23 Disturbance (B11.5)</p> <p>Refer to clause B3.4</p> <p>12.1.24 Environmental disturbance (B11.6)</p>				
---	--	--	--	--

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/103	<p>Post-tender information (B12.2)</p> <p>12.2.1 Payment of Preliminaries (B10.2) Alternative chosen: A</p> <p>12.2.2 Adjustment of Preliminaries (B10.3) Alternative chosen: A</p> <p>12.2.3 Additional agreed Preliminaries items</p>	Item	R
Carried to Trade Summary	PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
1/1/104	<p><u>Section C: Specific Preliminaries:</u></p> <p>Proprietary branded products</p> <p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/105	<p>Overtime</p> <p>Tenderers will be allowed to work two shifts in order to meet the completion date. Any costs associated with this requirement will be priced under this item</p> <p>Should overtime be required to be worked for any other reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/106	<p>As built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records.</p> <p>F:..... V:..... T:.....</p>	Item	R	

Carried to Trade Summary

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

1/1/107	<p>Site instructions</p> <p>Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/108	<p>Non Cession of Monies</p> <p>The Contractor shall NOT cede nor assign his rights or claims to any monies due or to become due under this contract.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/109	<p>Labour record</p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/110	<p>Plant record</p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/111	<p>Community Liaison Officer</p> <p>The Contractor shall employ one Community Liaison Officer (CLO), nominated by the community for full duration of the contract. The duties of the CLO and the conditions of employment shall be in accordance with Annexure D Agreement of Temporary Employment as Community Liaison Officer attached to these Bills of Quantities</p>	Item		
	Carried to Trade Summary		R	
	<p>PRELIMINARIES Bill No. 1 PRELIMINARIES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

1/1/112	<p>Note: The CLO's rate of remuneration shall be R170.00 per working day</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/113	<p>Community involvement</p> <p>It is a prerequisite and condition of tender that the successful Contractor continuously employ a minimum of 50% of the on site workforce (excluding specialist subcontractors e.g. Electrical installation workforce, etc) in respect of unskilled labour requirements, from local residents living in the immediate vicinity and/or surrounding local communities for the respective building works at normal wage rates. The representative / agent shall be empowered to inspect the books and records of the contractor from time to time to ensure that this requirement is met. Should it become apparent that this condition is not complied with, the representative / agent shall close down the works until such time as this requirement is met. Any such work stoppages will be for the Contractor/s account. Any difficulty experienced by the Contractor in the procurement of the required percentage of local labour is to be immediately referred to the representative / agent.</p>	Item		
	Carried to Trade Summary	R		

PRELIMINARIES

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

<p><u>Local Economic Development (LED)</u></p> <p>In the department's decision on LED implementation, its strategies and the process of arriving at a LED strategy is that, Local economic development must aim to create jobs by making the local economy grow. As part of the strategy, in any project that belongs to the Department of Public Works and Infrastructure, there MUST be a subcontracting of the works to at least a minimum of 25% of the value of the contract so as to make the economy grow and create income opportunities for more people, especially the poor.</p> <p>Key principles underlying Local Economic Development include:</p> <ul style="list-style-type: none">• making job creation and poverty alleviation a priority in any LED strategy• targeting previously disadvantaged people, marginalized communities and geographical regions, black economic empowerment enterprises and SMMEs to allow them to participate fully in local economies.• promoting local ownership, community involvement, local leadership and joint decision-making.• involving local and national partnerships between communities, businesses and government to solve problems, create joint business ventures, and build local areas.• using local resources and skills.• integrating diverse economic initiatives in a comprehensive approach to local development• applying flexible approaches to responding to changing conditions.				<p>R</p>
<p>Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<p>It is a prerequisite and condition of tender that the successful Contractor ensures a minimum of 25% of the works (including specialist subcontractors e.g. Electrical installation workforce, etc.) in respect of Local Economic Development requirements, from local residents living in the immediate vicinity and/or surrounding local communities for the respective building works at market related rates.</p> <p>The representative / agent shall be empowered to inspect the books and records of the contractor from time to time to ensure that this requirement is met. Should it become apparent that this condition is not complied with, the representative / agent shall close down the works until such time as this requirement is met.</p> <p>Any such work stoppages will be for the Contractor/s account. Any difficulty experienced by the Contractor in the procurement of the required percentage of local economic development is to be immediately referred to the representative / agent.</p> <p>1/1/114 The tenderer is to allow attending to the Local Economic Development as stipulated in the notes as well as for any potential risks associated with the procurement of the local sub-contractors.</p> <p>F:..... V:..... T:.....</p>				
	<p style="text-align: center;">Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>		Item	R	

<p>1/1/115</p>	<p><u>Contractor Development Programme (CDP)</u></p> <p>CO-ORDINATION AND SUPERVISION.</p> <p>The Contractor is to promote the participation and development of registered CDP Contractors by means of subcontracting defined portions of the works to such contractors to a value not less than 5% of the contract sum.</p> <p>The Contractor is to co-ordinate and supervise the work of all these CDP Contractors in such a manner and at all times, as will suit the building programme and he is to allow adequate access for the CDP Contractors where required, to carry out their work in an efficient manner and acceptable quality standards in accordance with the specifications as no claims for extras in this regard will be entertained.</p> <p>ATTENDANCE.</p> <p>The Contractor may allow for attendance upon the CDP Contractors concerned to execute the work. The Contractor is to allow the CDP Contractors the use of any scaffolding while it remains erected on the site.</p> <p>Where scaffolding is necessary for the use by any CDP Contractor and where the Contractor has not erected any for his own use or has removed same after his own use, the Contractor shall supply sufficient scaffolding to the CDP Contractors to be erected and dismantled by the CDP Contractor and returned to the Contractor.</p> <p>This attendance upon CDP Contractors to execute the work is to include for the scaffolding provisions as aforesaid and, in addition, is to include for co-operating to the fullest extent with all the parties involved, attending on off-loading materials, providing suitable storage for tools and materials used by the CDP Contractors, use of general facilities such as latrines, etc., supply and cost of power, lighting, water and the like. The Employer expect the Contractor to support the CDP Contractors as far as reasonably possible to realise the completion of the project.</p> <p>F:..... V:..... T:.....</p>	<p>Item</p>	<p>R</p>	
	<p>Carried to Trade Summary</p> <p>PRELIMINARIES Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 1	Page No	Amount R
PRELIMINARIES		
Bill No. 1		
PRELIMINARIES		
<u>COLLECTION PAGE</u>		
Total Brought Forward from Page No.	1	
Total Brought Forward from Page No.	2	
Total Brought Forward from Page No.	3	
Total Brought Forward from Page No.	4	
Total Brought Forward from Page No.	5	
Total Brought Forward from Page No.	6	
Total Brought Forward from Page No.	7	
Total Brought Forward from Page No.	8	
Total Brought Forward from Page No.	9	
Total Brought Forward from Page No.	10	
Total Brought Forward from Page No.	11	
Total Brought Forward from Page No.	12	
Total Brought Forward from Page No.	13	
Total Brought Forward from Page No.	14	
Total Brought Forward from Page No.	15	
Total Brought Forward from Page No.	16	
Total Brought Forward from Page No.	17	
Total Brought Forward from Page No.	18	
	Carried Forward	
PRELIMINARIES		R
Bill No. 1		
PRELIMINARIES		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Item No	Unit	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>ALTERATIONS</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Notes: Demolitions and work on site</u></p> <p>All demolitions and works on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with the work. The utmost care is to be observed to avoid any structural or other damages in the remaining portions of the existing building.</p> <p>Special care is to be exercised not to interfere with any electrical installation, and notice is to be given to the Representative/Agent when any disconnections, removal of wire, etc., are necessary and the Contractor is to afford every facility to the workmen carrying out his work.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				R

<p>The Contractor shall not remove or interfere with any furniture, fittings or similar articles unless specially mentioned in the following items and shall give adequate notice to the Representative/Agent if the removal of any such articles from parts of the buildings are to be altered becomes necessary so that the Employer may have same removed before the Contractor commences work in such parts.</p> <p>The Contractor will be held solely responsible for any damage to persons and property and for the safety of the structures and must make good at his own expense any damage that may occur.</p> <p><u>Notes: Damage and repairs to services</u></p> <p>Should the Contractor damage any services which are to remain in operation or any services which have not yet been disconnected prior to removal, then the Contractor will be held solely responsible for such damage and any further resultant damage.</p> <p>The Contractor shall immediately notify the Representative/Agent and the Authorities concerned and he shall at his own cost make all necessary arrangements for disconnection and repairs with the relevant Authorities and shall pay all fees and charges levied.</p> <p><u>Notes: Alterations, servicing and repair work to existing doors, frames and windows</u></p> <p>The removal and reinstatement of doors, frames, windows, etc. for the purpose of altering, servicing and/or repairing are measured elsewhere.</p> <p>The removal of ironmongery, glass, putty, etc and the re-fixing, re-glazing and re-decorating of existing doors, frames, windows, etc. are all measured elsewhere.</p> <p>Repairing and/or replacement of existing ironmongery is measured elsewhere.</p> <p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>					
--	--	--	--	--	--

<p><u>Notes: Repair work to timber to include for the following, unless otherwise described</u></p> <ol style="list-style-type: none">1. Timber used in repairs is to match existing in type, moisture content, colour and grain as closely as possible.2. Approved modern, high strength waterproof glues which can accommodate any timber movement should be used together with sawdust filler of matching timber.3. Only non-corrosive fixings are to be used4. All clamping and pinning as necessary <p><u>Notes: Disposal of material</u></p> <p>All existing materials specified to be "removed", "demolished and removed", "hacked up or off and removed", or "taken down or off and removed" or "broken down and removed", etc., become the property of the Contractor. These materials and all debris, rubbish and earth material must be carted away by the Contractor and the site must be left clean and unencumbered. The contractor must make his own arrangements for dumping and shall pay all fees and charges levied.</p> <p>If any of the bricks or other materials specified to be "removed" are sound and considered suitable for any portion of the new work they must be thoroughly cleaned off and stacked on site for inspection by the Representative/Agent. The approval of the Representative/Agent must be obtained before any such materials are re-used in the new work.</p> <p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				
--	--	--	--	--

<p>All existing materials specified to be "taken down and set aside for re-use" or "taken down and set aside" shall remain the property of the Employer and must be cleaned off, cleared of all nails, etc., and neatly stacked and stored on site by the Contractor where directed and carefully handled during taking down, storage and re-fixing. The Contractor will be held responsible for the safety of these materials and must take all the necessary precautions for their protection and any damage or loss that may occur must be made good by the Contractor at his own expense.</p>					
<u>TEMPORARY BARRIERS, SCREENS, ETC</u>					
<u>Temporary barriers, screens, etc including removal</u>					
<p><u>Temporary Barriers, Screens, Etc Of Painted Shutterboard, Corrugated Iron Sheeting Or Other Equal Approved On Timber Or Steel Framework To Provide Necessary Security Appropriate To This Contract Including Removal And Making Good All To Principal Agents Approval</u></p>					
2/1/1	External hoarding around site establishment area to a minimum height of 2.4m including flatwrap security mesh over, a vehicle gate and a pedestrian gate.	m	501		
2/1/2	Dust screen 3000mm high between concrete floor and ceiling formed of suitable timber framing with 250 micron polyethylene sheeting stapled on including corners, ends, etc.	m	189		
2/1/3	Hoarding to door size 1200 x 2100mm high to prevent access.	No	5		
<u>REMOVAL OF EXISTING WORK</u>					
<p><u>Breaking up and removing mass concrete</u></p>					
2/1/4	Steps	m ³	3		
<p><u>Breaking down and removing brickwork, etc</u></p>					
2/1/5	Half brick wall	m ²	418		
2/1/6	One brick wall	m ²	760		
<u>Carried to Trade Summary</u>					
<p>BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>					

	<u>Breaking down and removing concrete etc</u>					
2/1/7	Concrete surface bed.		m^2	1 158		
	<u>Break up and cart away floors in layers under concrete surface beds</u>					
2/1/8	Imported fill on existing floors in 150mm thick layers.		m^3	521		
	<u>Taking out and removing doors, windows, etc including thresholds, sills, etc (building up openings elsewhere)</u>					
2/1/9	Timber single door and frame not exceeding 2,5m ² .		No	6		
2/1/10	Timber double door and frame not exceeding 2,5m ² .		No	14		
	<u>Taking out and removing doors, windows, etc including thresholds, sills, etc (Altering openings elsewhere measured)</u>					
2/1/11	Timber single door and frame not exceeding 2,5m ² .		No	1		
2/1/12	Glazed steel window and frame not exceeding 2,5m ²		No	2		
	<u>Taking out and removing doors and Steel frames (Replace with new doors elsewhere measured):</u>					
2/1/13	Timber single door and frame not exceeding 2,5m ² .		No	48		
2/1/14	Timber glazed double door and frame exceeding 2,5m ² but not exceeding 5m ² .		No	32		
	<u>Taking out and removing doors and steel frames from brick walls to be demolished:</u>					
2/1/15	Timber single door and frame not exceeding 2,5m ² .		No	35		
2/1/16	Timber double door and frame not exceeding 2,5m ² .		No	17		
	<u>Taking out and removing windows and steel frames from brick walls to be demolished:</u>					
2/1/17	Steel window and frame not exceeding 2,5m ² .		No	40		
	Carried to Trade Summary					R
	BUILDING WORKS Bill No. 1 ALTERATIONS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Taking out doors, windows, etc including thresholds, sills, etc and setting aside for re-use (refixing elsewhere measured)</u>					
2/1/18	Timber single door and frame 813 x 2032mm high overall from 230mm external brick wall	No	24			
2/1/19	Timber single door and frame 813 x 2032mm high overall from 230mm internal brick wall	No	16			
2/1/20	Timber single door and frame 813 x 2032mm high overall from 115mm internal brick wall	No	17			
	<u>Refixing of existing doors, windows, etc (removal and setting aside elsewhere measured)</u>					
2/1/21	Setting up and building in timber door frame in brickwork, rehanging single door size 813 x 2032 on new 100mm brass hinges and replacing lock with cylinder mortice lockset complete.	No	57			
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>					
2/1/22	Doubled-pitched roof over the clinic and eaves formed of corrugated iron roof complete with roof sheeting laid on timber trusses, gutters and rainwater pipes, etc.	m ²	2 558			
2/1/23	Gypsum plasterboard ceilings, including cornices, timber bracing, etc.	m ²	1 959			
	<u>Taking out and removing sundry joinery work, joinery fittings, etc:</u>					
2/1/24	Timber skirtings from brickwork	m	668			
2/1/25	Timber wall cupboard 1800 x 600 x 2700mm high	No	5			
2/1/26	Shop front counter floor unit, 6000 x 1100x 900mm high complete with work-top.	No	1			
2/1/27	Timber sink cupboard 1770 x 600 x 1400mm high including disconnecting waste pipe.	No	2			
	Carried to Trade Summary					
BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/1/28	Timber sink cupboard 1770 x 600 x 1400mm high including disconnecting waste pipe (new sink, cupboard, sink complete with trap and connecting to new waste pipe elsewhere measured)	No	2			
	<u>Hacking up/off and removing floor coverings, etc from screeded floors:</u>					
2/1/29	Vinyl tile floor covering.	m ²	1 560			
2/1/30	Ceramic tiles floor covering.	m ²	60			
	<u>Hack Up/Off And Remove Granolithic, Screeds, Plaster, Etc. From Concrete Or Brickwork And Prepare Surfaces For New Screeds, Plaster, Etc.</u>					
2/1/31	25mm Screed to floors.	m ²	64			
	<u>Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes</u>					
2/1/32	Tiles to walls	m ²	970			
	<u>Taking out and removing piping, sanitary fittings, etc including cutting off as necessary, disconnecting piping from fittings and blocking off and making good damaged plasterwork to walls and screeds to floors (all redecoration work elsewhere):</u>					
2/1/33	Vitreous china wash hand basin.	No	38			
2/1/34	Vitreous china WC pan complete with cistern.	No	19			
	<u>Taking out and removing glass and mirrors</u>					
2/1/35	Glass from steel windows including cleaning out rebates and preparing for new glass (New glass elsewhere measured)	m ²	300			
	<u>Taking out and removing glass, mirrors, etc.</u>					
2/1/36	Mirror 500 x 1 000mm high from wall.	No	38			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

<u>Take Out And Remove Ironmongery, Etc.</u>				
2/1/37	Mortice lock and striking plate from timber door and steel frame.	No	57	
2/1/38	Chromium plated toilet paper holder.	No	19	
2/1/39	Chromium plated towel rail not exceeding 1000mm long.	No	38	
Carried to Trade Summary				
BUILDING WORKS Bill No. 1 ALTERATIONS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

	<u>OPENINGS THROUGH EXISTING WALLS ETC</u>				
	<u>Altering openings</u>				
2/1/40	Altering opening in 230mm brick wall where 813 x 2032mm high single timber door removed to form opening for new one-and-a-half leaf timber door and frame size 1245 x 2100mm high overall by breaking out brickwork on both sides and bottom including necessary precast concrete lintel and making good plaster on both sides and into reveals (new door and frame and making good paintwork elsewhere measured)	No	1		
2/1/41	Altering opening in 230mm brick wall where 2000 x 1245mm high steel window was removed to form opening for new single timber door and frame size 813 x 2032mm high overall by building up brickwork on right-hand side and breaking out brickwork on the bottom side including necessary precast concrete lintel and making good plaster on one side and into reveals and face brickwork on other side and into reveals complete with 300 x 300 x 2mm vinyl floor finish to threshold (new door, frame and making good paintwork elsewhere measured)	No	2		
	<u>Breaking out for and forming openings through brick walls for new doors and frames including necessary precast concrete lintels and making good plaster on one side and into reveals and face brickwork on other side and into reveals complete with concrete thresholds and steel trowelled finish (new doors and frames and making good paintwork elsewhere)</u>				
2/1/42	Opening for single timber door with steel frame 815 x 2030mm high overall through 230mmth brick wall.	No	6		
2/1/43	Opening for one-and-a-half leaf timber door with steel frame 1245 x 2100mm high overall through 230mmth brick wall.	No	3		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>CUTTING THROUGH FLOORS AND CEILINGS</u>					
2/1/44	Cutting through 125mm thick concrete surface bed for 600mm wide concrete wall footing including making good concrete on both sides of new 110mm thick brick wall		m	97		
2/1/45	Cutting through 125mm thick concrete surface bed for 900mm wide concrete wall footing including making good concrete on both sides of new 220mm thick brick wall		m	112		
	<u>BUILDING UP OPENINGS</u>					
	<u>Brickwork of NPX bricks in class II mortar in building up openings:</u>					
2/1/46	One brick walls		m ²	164		
	<u>Sundries:</u>					
2/1/47	Cutting toothings and bonding new brickwork to existing "Corobrick" or similar and approved face bricks pointed with recessed horizontal and vertical joints		m ²	30		
2/1/48	Extra over brickwork for face brickwork in patches		m ²	68		
2/1/49	Cutting toothings and bonding new face brickwork to existing		m ²	21		
	<u>PREPARATORY WORK TO EXISTING SURFACES</u>					
	Comprise preparatory work to existing surfaces, etc					
2/1/50	Hacking existing epoxy finished floor surfaces to receive new (New epoxy finish elsewhere measured)		m ²	64		
2/1/51	Internal plaster and paint from ceilings and beams and prepare to receive new (New plaster and paint elsewhere measured)		m ²	5 909		
	Carried to Trade Summary					R
	BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/1/52	Carefully scrap down paintwork and prepare walls to receive new plaster and paint (new plaster and paint elsewhere measured)	m ²	3 950		
	<u>MAKING GOOD OF FINISHES, ETC.</u>				
	<u>Making good brickwork to face of.:</u>				
2/1/53	Wall where 115mm brick cross wall removed	m	146		
2/1/54	Wall where 230mm brick cross wall removed	m	112		
	<u>Making good screed and 300 x 300mm x 2mm "Marley Economy plus" vinyl floor tiles on.:</u>				
2/1/55	Floors where 115mm brick walls removed	m	155		
2/1/56	Floors where 230mm brick walls removed	m	282		
	<u>Waterjet existing surfaces with high pressure low- volume water jetting lance to remove all dirt, brush down and wash to remove surface contamination, mould, fungus, damp and treat with two coats of antifungal wash and leave perfectly clean on completion:</u>				
2/1/57	Facebrick walls including brushing down joints, etc	m ²	3 998		
	<u>UNBLOCK OF SEWER SYSTEMS, ETC:</u>				
	<u>Inspecting, repairing, cleaning and unblocking sewer system:</u>				
2/1/58	Allow an amount to inspect, repair and unblock sewer systems behind all ablutions and leave in perfect working order.	Item			
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>GENERAL REPAIR WORKS</u>			
2/1/59	<p><u>Repair work to existing brick walls:</u></p> <p>Neatly cutting into and removing plaster for a width of approximately 200mm on either side of crack, raking out crack and removing all surface contamination and dust, lightly scabbling smooth surfaces, ensuring area is dry and applying an approved flowable epoxy grout into crack, allowing to cure and applying approved plaster bonding liquid with reinforcing mesh extending 100mm beyond the crack in all directions and finishing neatly in 1:4 cement plaster flush with the surrounding wall plaster</p>		Item	
2/1/60	<p><u>Repairwork to existing floors:</u></p> <p>Neatly cutting into and removing granolithic screed for a width of approximately 150mm on either side of floor crack, raking out crack and removing all surface contamination and dust, lightly scabbling smooth surfaces, ensuring area is dry and applying an approved flowable epoxy grout into crack, allowing to cure and applying approved plaster bonding liquid with reinforcing mesh extending 100mm beyond the crack in all directions and finishing neatly with untinted granolithic screed flush with the surrounding floor surface</p>		Item	
	Carried to Trade Summary		R	
BUILDING WORKS Bill No. 1 ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Section No. 2	BUILDING WORKS	Bill No. 1	ALTERATIONS	<u>COLLECTION PAGE</u>	Page No	Amount R
				Total Brought Forward from Page No.	31	
				Total Brought Forward from Page No.	32	
				Total Brought Forward from Page No.	33	
				Total Brought Forward from Page No.	34	
				Total Brought Forward from Page No.	35	
				Total Brought Forward from Page No.	36	
				Total Brought Forward from Page No.	37	
				Total Brought Forward from Page No.	38	
				Total Brought Forward from Page No.	39	
				Total Brought Forward from Page No.	40	
				Total Brought Forward from Page No.	41	
				Total Brought Forward from Page No.	42	
				Carried Forward to Summary of Section No.		
				BUILDING WORKS		
				Bill No. 1		
				ALTERATIONS		
				<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p><u>Nature of Ground.:</u></p> <p>The soil material on site varies between clayey-silty sands and clays of low plasticity, respectively classifying as SC-SM and CL. These soils are corrosive. The shale encountered at depth is characterised as either poorly graded gravels or clayey gravels of low plasticity.</p> <p>(For more details on the soil conditions, please refer to the attached geotechnical investigation report marked as annexure E)</p> <p>Descriptions of excavations shall be deemed to include all ground conditions classified as "earth" described in the above report and where more difficult character as indicated, these are separately measured.</p> <p><u>Carting away of excavated material.:</u></p> <p>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.</p> <p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 2 EARTHWORKS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

Excavations, Filling , etc.

The Contractor shall notify the Principal Agent as soon as the excavations are ready to receive foundations and no building work may be started until the Principal Agent has approved the excavations.

Over excavations taken beyond the levels and sizes shown or required to obtain a solid foundation shall be filled by the contractor, at his own expense, with 15MPa concrete.

Should the Contractor consider that any of the excavations are more difficult in nature than excavations in "earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly.

The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavations shall not determine the classification of the material excavated.

Blasting:

No blasting will be allowed without the written permission of the Principal Agent.

Should blasting be necessary, the Contractor shall take every precaution to protect the Works and persons, animals and property in the vicinity of the Works. The Contractor will be held responsible for any injury or damage caused by any blasting operations and shall make good such damage at his own expense.

Testing:

Prices for filling are to include for all necessary density tests in accordance with SANS 1200D.

Prescribed density tests:

Carried to Trade Summary

BUILDING WORKS

Bill No. 2

EARTHWORKS

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

	<u>SITE CLEARANCE, ETC.</u>				
	NOTE: The Contractor is specifically referred to the SANS 1200 clause regarding the number of density tests required on the layer work, filling, etc. The tests as prescribed are deemed to be included in the appropriate rates for the layer work, filling, etc. and will not be paid for separately. The following density tests measured are over and above those normally required by SANS 1200 and is for the use of the Engineer only and will only be paid for if instructed in writing and approved as acceptable by the Engineer.				
	<u>Site clearance, etc.:</u>				
2/2/1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scaffolding up as required and cart away all vegetation and debris.	m ²	2 724		
2/2/2	Stripping average 200mm thick layer of top soil and stockpiling on site.	m ²	2 724		
	<u>REMOVAL OF TREES ETC</u>				
	<u>Taking out and removing, grubbing up roots and filling in holes:</u>				
2/2/3	Tree exceeding 2000mm and not exceeding 2500mm girth.	No	2		
2/2/4	Tree exceeding 2500mm and not exceeding 3000mm girth.	No	3		
	<u>BULK EXCAVATION, FILLING, ETC</u>				
	<u>Open face excavation in all materials other than rock over sloping site.:</u>				
2/2/5	Reduced levels under floors.	m ³	2 737		
	<u>Extra over bulk excavation in earth for excavation in</u>				
2/2/6	Soft rock	m ³	137		
	<u>Carried to Trade Summary</u>				R
	BUILDING WORKS Bill No. 2 EARTHWORKS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/2/7	Hard rock	m ³	68			
	<u>Extra over bulk excavation in earth for breaking up and removing</u>					
2/2/8	Brickwork	m ³	120			
2/2/9	Unreinforced concrete	m ³	120			
2/2/10	Reinforced concrete	m ³	120			
	<u>Extra over all Bulk excavations for carting away;</u>					
2/2/11	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m ³	2 737			
	<u>Earth filling supplied by the contractor, temporarily stockpiled on site including haulage approximately 100m from perimeter of stock piles.:</u>					
2/2/12	150mm Thick sub-base course of G5 material compacted to 93% MOD AASHTO density in 150mm thick layers, under floors, aprons, ramps, steps, etc.	m ³	913			
2/2/13	150mm Thick sub-base course of G6 material compacted to 93% MOD AASHTO density in 150mm thick layers, under floors, aprons, ramps, steps, etc.	m ³	1 825			
	<u>Filling with approved material from the excavations and spread, level, water and compact to a density of at least 93% Mod.AASHTO maximum and trim level:</u>					
2/2/14	Under floors, pavings, etc.	m ³	402			
	<u>Prescribed density tests on filling.:</u>					
2/2/15	Modified AASHTO Density test.	No	203			
2/2/16	"Field Density" test including "Optimum Moisture Content" (four readings per test)	No	203			
	<u>Compaction of surfaces:</u>					
2/2/17	Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.	m ²	3 042			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 2 EARTHWORKS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				R	

	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
	<u>Excavation in all materials other than rock not exceeding 2m deep.:</u>				
2/2/18	Trenches.	m ³	1 567		
2/2/19	Holes.	m ³	278		
	<u>Extra over excavation other than bulk in all materials for excavation in (on-site verification required for payment).:</u>				
2/2/20	Soft rock.	m ³	92		
2/2/21	Hard rock.	m ³	46		
	<u>Back excavation of vertical sides of excavation in all materials other than rock for working space including backfilling compacted to 93% Mod. AASHTO maximum density.:</u>				
2/2/22	Exceeding 500mm and not exceeding 1500mm deep for erection and removal of formwork to strip footing, bases, ground beams, etc.	m ²	3 946		
	<u>Risk of collapse of excavations other than bulk.:</u>				
2/2/23	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	3 946		
	<u>Extra over all excavations other than bulk for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk).:</u>				
2/2/24	Off site to a dumping site to be found by the Contractor.	m ³	1 845		
	<u>Earth filling supplied by the contractor, temporarily stockpiled on site including haulage approximately 100m from perimeter of stock piles.:</u>				
2/2/25	150mm Thick sub-base course of G5 material compacted to 93% MOD AASHTO density in 150mm thick layers, under floors, aprons, ramps, steps, etc.	m ³	566		
	Carried to Trade Summary				
	BUILDING WORKS Bill No. 2 EARTHWORKS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			R	

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 2 EARTHWORKS <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	44	
Total Brought Forward from Page No.	45	
Total Brought Forward from Page No.	46	
Total Brought Forward from Page No.	47	
Total Brought Forward from Page No.	48	
Total Brought Forward from Page No.	49	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 2		
EARTHWORKS		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests:</u></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 to the approval of the Architect. (Test cubes are measured separately).</p> <p><u>Formwork:</u></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.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

<p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc. shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described.</p> <p>Unless otherwise agreed as being measurable in terms of the foregoing paragraph, formwork necessitated by irregularly excavated faces or for other reasons decided upon by the contractor (e.g. over excavation) is not separately measurable. The cost thereof shall be deemed to be included in the contractor's allowance for concrete cast against excavated surfaces.</p> <p>Provisional quantities allowing for the formwork described above together with the associated excavation for working space, have been measured in these Bills of Quantities. In the final account, these provisional quantities will be omitted and formwork to be measured will be determined by the initial prescription and/or subsequent authorised instructions of the structural engineer, together with formwork determined by the quantity surveyor as being necessary as defined above</p> <p>For tendering purposes, the structural engineer has indicated that, for design purposes, he will require formwork to all the sides of the following concrete elements below ground level:</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formwork to sides of bases, pile caps, ground beams, etc., will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.</p>				
<p>Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R	

	The structural engineer reserves the right to vary the above requirements at any time during the construction period at his discretion				
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>15 Mpa/19mm Concrete.:</u>				
2/3/1	Surface blinding under bases, beams, footings, etc. (Provisional).	m ³	9		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>25 Mpa/19mm Concrete:</u>				
2/3/2	Strip footings.	m ³	346		
	<u>REINFORCED CONCRETE</u>				
	<u>25 Mpa/19mm Concrete.:</u>				
2/3/3	Surface beds on waterproofing.	m ³	400		
2/3/4	Walls	m ³	37		
2/3/5	Slabs, including beams and inverted beams	m ³	34		
2/3/6	Ramps	m ³	8		
	<u>30 Mpa/19mm Concrete.:</u>				
2/3/7	Composite hollow block slabs including ribs, beams and inverted beams.	m ³	185		
2/3/8	Bases.	m ³	56		
2/3/9	Isolated beams	m ³	70		
2/3/10	Columns.	m ³	39		
2/3/11	Stairs including landings, beams and inverted beams.	m ³	122		
	Carried to Trade Summary				
	BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

	<u>HOLLOW BLOCKS, ETC. TO COMPOSITE SLABS</u>				
	<u>? Hollow Blocks As Manufactured By ?, In Slab And Rib Construction And Maintained In Position Whilst Steel Reinforcement Is Fixed And Concrete Is Placed</u>				
2/3/12	Spacing tiles size 150 x 200 x 115mm thick to soffit of solid sections of composite slab.	m ²	2 313		
	<u>? hollow blocks in composite slabs</u>				
2/3/13	Provide the sum of R3,500,000.00 (Three Million Five Hundred Thousand Rand) for hollow blocks delivered to site on pallets.	Item			3 500 000.00
2/3/14	Allow for taking delivery of ditto on pallets, pallets each size 1200mm square and weighing approximately 900kg, unload by mechanical means, hoist to the various levels, set on formwork and maintain in position whilst concrete is being placed, size of blocks 560 x 400 x 250mm high. (Note: Blocks are to remain on pallets for ease of handling and the Contractor is responsible for any breakages).	No	1		
2/3/15	Allow for additional profit if required. (CPAP Work Group No. Excluded).	Item			
	<u>PREFABRICATED CONCRETE BEAMS</u>				
	<u>"?" prefabricated prestressed concrete beams in composite slabs</u>				
2/3/16	75 x 75mm Beams with 2 x 4mm reinforcing wires, in lengths not exceeding 5m.	m	458		
	Carried to Trade Summary			R	
BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

	<u>TEST BLOCKS</u>					
2/3/17	<u>Test blocks.:</u> Making and testing sets of three 150 x 150 x 150 mm concrete strength test cubes (Provisional).	Sets	158			
2/3/18	<u>CONCRETE SUNDRIES</u>					
	<u>Finishing top surfaces of concrete smooth with a power float.:</u>					
2/3/19	Surface beds, slabs, etc.	m ²	131			
	<u>Finishing top surfaces of concrete smooth with a wood float.:</u>					
2/3/20	Finishing smooth top surfaces of grading to falls for waterproofing.	m ²	3 205			
	<u>Under concrete insulations, etc.:</u>					
2/3/21	40mm Expanded polystyrol under concrete flat roof with R-value:1 and less than 3% deformation under 150kpa pressure.	m ²	2 724			
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>					
	<u>Rough formwork to Sides.:</u>					
2/3/22	Bases.	m ²	93			
2/3/23	Strip footings (Provisional).	m ²	768			
2/3/24	Rectangular columns exceeding 1500mm not exceeding 3500mm high. (Provisional).	m ²	195			
2/3/25	Edges, risers, ends, and reveals not exceeding 300mm high.	m	137			
2/3/26	Walls	m ²	410			
	Beams.	m ²	530			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

2/3/27	Sloping and stepped outer edges of stairs not exceeding 400mm high extreme	m	104			
	<u>Rough formwork to soffits</u>					
2/3/28	Slabs exceeding 250mm and not exceeding 500mm thick, propped up exceeding 1500mm and not exceeding 3500mm high	m ²	131			
2/3/29	Beams exceeding 1500mm high not exceeding 3500mm high.	m ²	149			
2/3/30	Stairs with sloping soffits	m ²	130			
2/3/31	Landings exceeding 250mm and not exceeding 500mm thick	m ²	7			
	<u>Supporting bearers to prefabricated beams</u>					
2/3/32	Bearers propped up exceeding ?mm and not exceeding ?mm high	m	229			
	<u>Boxing in rough formwork to form</u>					
2/3/33	100 x 50mm Horizontal grooves along bottom edges	m	96			
	<u>Boxing in smooth formwork to form</u>					
2/3/34	20 x 20mm Chamfers along top or bottom edges	m	96			
	<u>MOVEMENT JOINTS ETC.</u>					
	<u>Saw cut joints.:</u>					
2/3/35	40 x 3mm Saw cut joint in top of concrete.	m	550			
	<u>'Sondo Jointex' or equal and approved joint forming material in movement joints between horizontal concrete and brick surfaces including 10mm expanded Polystyrol Bondbreaker:</u>					
2/3/36	10mm Joints not exceeding 300mm wide.	m	1 388			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				R	

	<u>Expansion joints with softboard between vertical concrete and brick surfaces</u>					
2/3/37	10mm Joints not exceeding 300mm high along edges of surface beds	m	833			
	<u>REINFORCEMENT (PROVISIONAL)</u>					
	<u>High tensile steel reinforcement to structural concrete work.:</u>					
2/3/38	High tensile steel bars of varying diameter.	t	51.27			
	<u>Mild steel reinforcement to structural concrete work.:</u>					
2/3/39	Mild steel bars of varying diameter.	t	59.22			
	<u>Fabric reinforcement.:</u>					
2/3/40	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	2 313			
2/3/41	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m ²	365			
	Carried to Trade Summary				R	
	BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 3 CONCRETE, FORMWORK AND REINFORCEMENT <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	51	
Total Brought Forward from Page No.	52	
Total Brought Forward from Page No.	53	
Total Brought Forward from Page No.	54	
Total Brought Forward from Page No.	55	
Total Brought Forward from Page No.	56	
Total Brought Forward from Page No.	57	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 3		
CONCRETE, FORMWORK AND REINFORCEMENT		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>MASONRY</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</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 shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.</p> <p><u>Face bricks.:</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour.</p> <p><u>Pointing.:</u></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.</p> <p>All pointing to be approved by the Architect via sample panel which is to be built on site.</p> <p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 4 MASONRY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>Sample panels.:</u> 2/4/1 The contractor to build a sample panel size 1.5 x 1m high detailing quality of facebrick work to the approval of Architect at contractors cost.				
				Item	
	<u>FOUNDATION BRICKWORK</u>				
	<u>Brickwork of NFX bricks in class II mortar.:</u>				
2/4/2	Half brick walls.	m ²	277		
2/4/3	One brick walls.	m ²	791		
2/4/4	440 x 440mm Brick piers, in heights not exceeding 1.5m high.	m	56		
	<u>BRICKWORK IN SUPERSTRUCTURE</u>				
	<u>Brickwork of NFP bricks in class II mortar.:</u>				
2/4/5	Half brick walls.	m ²	1 627		
2/4/6	Half brick walls in beam filling.	m ²	278		
2/4/7	One brick walls.	m ²	4 140		
2/4/8	760 x 760mm Brick piers, in heights exceeding 3m and not exceeding 4,5m high.	m	96		
	<u>Carried to Trade Summary</u>				
	BUILDING WORKS Bill No. 4 MASONRY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

	<u>BRICKWORK SUNDRIES</u>				
	<u>'Jointex' joint forming material in movement joint.:</u>				
2/4/9	10mm Expanded polysulphide joint former with sendor strip vertically between brick skins not exceeding 300mm wide.	m	100		
	<u>Brickwork reinforcement (Provisional).:</u>				
2/4/10	75mm Wide reinforcement built in horizontally.	m	6 509		
2/4/11	150mm Wide reinforcement built in horizontally.	m	23 216		
	<u>Pre stressed fabricated lintels.:</u>				
2/4/12	Lintels in lengths not exceeding 3m suitable for half brick wall.	m	57		
2/4/13	Lintels in lengths not exceeding 3m suitable for one brick wall.	m	505		
2/4/14	Lintels in lengths not exceeding 3m suitable for one brick wall (one side of one brick wall to receive face brick lintol elsewhere measured).	m	78		
2/4/15	Lintels in lengths exceeding 3m but not exceeding 4.5m suitable for one brick wall.	m	68		
	<u>Galvanised hoop iron cramps, ties, etc.:</u>				
2/4/16	30 x 1mm Wall tie 600mm long with both ends built into brickwork.	No	450		
	<u>Air bricks, etc.:</u>				
2/4/17	230 x 160 x 35mm Terracotta vermin proof air brick.	No	100		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 4 MASONRY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>FACE BRICKWORK</u>				
<u>Facebricks Prime Cost Of R6 500.00 Per Thousand Excluding VAT Delivered To The Site Pointed With Square Recessed Horizontal And Vertical Joints.:</u>					
2/4/18	Extra over brickwork for face brickwork in foundations.	m ²	1 207		
2/4/19	Extra over brickwork for face brickwork.	m ²	2 481		
2/4/20	Extra over half brick wall for face brick work in beam filling.	m ²	278		
2/4/21	Extra over brickwork for facing 760 x 760mm piers.	m	96		
2/4/22	Extra over brickwork for face brick work in brick-on-edge header lintel 230mm wide.	m	483		
2/4/23	24 x 120mm Window sills set flat and slightly projecting.	m	350		
<u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc.:</u>					
<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>					
2/4/24	220mm Wide brick od edge header course sills set sloping and slightly projecting.	m	363		
Carried to Trade Summary					
BUILDING WORKS Bill No. 4 MASONRY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 4 MASONRY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	59	
Total Brought Forward from Page No.	60	
Total Brought Forward from Page No.	61	
Total Brought Forward from Page No.	62	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 4		
MASONRY		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>WATERPROOFING</u>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing.:</u>			
	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.			
	<u>DAMPROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastics Brikgrip DPC embossed damp proof course or equal and approved.:</u>			
2/5/1	Vertically in walls.	m ²	191	
2/5/2	Horizontally in walls.	m ²	214	
	<u>One layer of 350 micron Consol Plastics Gunplas USB Green waterproof sheeting (or equal and approved) sealed at laps with Gunplas Pressure Sensitive Tape.:</u>			
2/5/3	Under surface beds.	m ²	3 205	
	Carried to Trade Summary			
	BUILDING WORKS Bill No. 5 WATERPROOFING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		R	

	<u>WATERPROOFING TO ROOFS, BASEMENTS, ETC</u>				
	<u>4mm Derbigum SP or equal and approved fully bonded waterproofing:</u>				
2/5/4	On sloping roofs.	m ²	131		
2/5/5	On internal surfaces of 50mm diameter full bore outlet.	No	8		
2/5/6	Dress waterproofing around 100mm diameter fullbore outlet and seal (All in accordance with the manufacturer's instructions).	No	8		
	<u>PROTECTIVE PAINT</u>				
	<u>Two coats Silvakote bituminous aluminium paint</u>				
2/5/7	On waterproofing to roofs.	m ²	131		
	<u>JOINT SEALANTS ETC</u>				
	<u>Two part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc including raking out expansion joint filler if necessary.:</u>				
2/5/8	In 40 x 3 mm saw cut joints in floors.	m	550		
2/5/9	In 10 x 10mm expansion joints vertically between bricks skins not exceeding 300mm deep.	m	1 666		
2/5/10	In 10mm x 10mm movement joints between surface bed and brick wall.	m	1 388		
	<u>Approved polyurethane sealing compound including backing cord, bond breaker, primer, etc:</u>				
2/5/11	In joints between steel frames and walls	m	1 043		
	<u>Silicone sealing, etc.:</u>				
2/5/12	Joints not exceeding 10mm between timber skirting and wall.	m	469		
	Carried to Trade Summary				R
	BUILDING WORKS Bill No. 5 WATERPROOFING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Section No. 2			
BUILDING WORKS			
Bill No. 5			
WATERPROOFING			
<u>COLLECTION PAGE</u>			
	Page No		Amount R
Total Brought Forward from Page No.	64		
Total Brought Forward from Page No.	65		
Carried Forward to Summary of Section No.			R
BUILDING WORKS			
Bill No. 5			
WATERPROOFING			
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>ROOF COVERINGS</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Ribbed roofing sheets.:</u></p> <p>The sheets shall be fixed in accordance with the manufacturer's recommendations with side-laps on the leeward side of the prevailing wind direction.</p> <p><u>Cutting of sheets.:</u></p> <p>All cutting of sheets shall be properly performed and all exposed cut edges shall be perfectly straight and treated to match roof finish.</p> <p style="text-align: right;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 6 ROOF COVERINGS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>				
	<u>GALVANISED STEEL ROOF SHEETING</u>				
	<u>0.8mm Galvanised IBR sheet steel with Chromadek finish on one side in single lengths fixed to timber purlins or rails and 0.6mm galvanised sheet steel accessories with Chromadek finish on one side:</u>				
2/6/1	Roof covering with pitch not exceeding 25 degrees, in transportable lengths not exceeding 20m.	m ²	3 510		
	<u>0.58mm Galvanised IBR sheet steel with Chromadek finish on one side in single lengths fixed to timber purlins or rails and 0.6mm galvanised sheet steel accessories with Chromadek finish on one side:</u>				
2/6/2	Roof covering with pitch not exceeding 25 degrees, in transportable lengths not exceeding 20m.	m ²	1 522		
	<u>6mm Galvanised IBR sheet accessories.:</u>				
2/6/3	Valley flashing 462mm girth three times bent.	m	218		
2/6/4	Hip capping 462mm girth three times bent.	m	386		
2/6/5	Ridge flashing 462mm girth twice bent.	m	245		
	<u>INSULATION TO ROOFS</u>				
	<u>Sisalation 405 Housing grade aluminium foil based insulation.:</u>				
2/6/6	Insulation to timber purlins fixed concurrent with roof covering including fitment strictly to the manufacturer's instructions.	m ²	5 032		
	Carried to Trade Summary			R	
	BUILDING WORKS				
	Bill No. 6				
	ROOF COVERINGS				
	DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Section No. 2			
BUILDING WORKS			
Bill No. 6			
ROOF COVERINGS			
<u>COLLECTION PAGE</u>			
	Page No		Amount R
Total Brought Forward from Page No.	67		
Total Brought Forward from Page No.	68		
Carried Forward to Summary of Section No.			R
BUILDING WORKS			
Bill No. 6			
ROOF COVERINGS			
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>PREFABRICATED ROOF TRUSSES, ETC.</u></p> <p><u>Prefabricated metal connected timber roof trusses:</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

<p><u>Descriptions for pre-fabricated timber roof trusses:</u></p> <p>Descriptions of trusses shall be deemed to include all necessary splay cut ends, mitres, joining, wrought and shaped ends, connectors, plate connectors, clips, etc.</p> <p>Tendered rates must make provision for the aforesaid as no additional claims in this regard will afterwards be entertained.</p> <p><u>Timber:</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No. 563 or as defined in SABS Specification No. 1460.</p> <p><u>Bolts:</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135.</p> <p><u>Shear plates, tooth connectors and split rings:</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses".</p> <p><u>Washers:</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <ol style="list-style-type: none">1. Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2.5mm thickness.2. Bolts up to 12mm diameter: Washers shall be a minimum 36mm wide of minimum 4mm thickness.3. Bolts up to 20mm diameter: Washers shall be a minimum 60mm wide of minimum 5mm thickness.			
<p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>		R	

<p><u>Metal connector plates:</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel.</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanised as per SABS 934 before stamping.</p> <p>All connector plates shall have been tested by CSIR and be of size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR reports.</p>	<p><u>Truss construction:</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers.</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint.</p>	<p><u>Truss design:</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163, "Design of Tiber Structures" and Code 0160, "Loadings".</p>	<p><u>Truss spacing:</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss.</p>	<p><u>Truss pitch:</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type.</p>	<p>Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>
--	--	---	---	---	---

Truss loading:

Trusses shall be designed for a live load of 0.50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses".

Workshop drawings, design and erection guarantee certificates:

It will be expected from the contractor to timeously prepare, submit and obtain the necessary approvals from the Architect in respect of the required shop drawings, design and erection guarantee certificates as specified.

Dimensions:

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences.

Erection:

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses: as published by the institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer.

Carried to Trade Summary

BUILDING WORKS

Bill No. 7

CARPENTRY AND JOINERY

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

Design system:

The design system as documented in the bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on the design system.

However, contractors are to note that any design system of similar quality maybe used subject to prior written approval of the Architect.

Specific specifications for roof trusses
Unless specifically otherwise described, the following specifications will apply:

1. The pitch of all trusses to be 10°
2. All trusses to be single ply, unless otherwise described trusses at maximum 1200mm centres.
3. All trusses to be at maximum 1200mm centres, unless otherwise described.
4. All exposed structural laminated beams shall be of architectural finish, i.e. manufactured of clean grade (absolutely clean) high density timber wrought all round.

Carried to Trade Summary

BUILDING WORKS

Bill No. 7

CARPENTRY AND JOINERY

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

<p><u>Rates:</u></p> <p>Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified.</p> <p><u>Fixing.:</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete.</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given separately elsewhere.</p> <p><u>Decorative laminate finish.:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish.</p> <p><u>Joinery.:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts.</p> <p>All doors are to be pre-treated with a sealer as per Swartland specification.</p>				
---	--	--	--	--

Carried to Trade Summary

BUILDING WORKS

Bill No. 7

CARPENTRY AND JOINERY

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	Door types indicated refer to the full door specification and detail on the Door Schedule on Architect Drawing No. 500 and 501.			
	<u>Allow for the preparation and submission of the following documents:</u>			
2/7/1	Detailed shop drawings indicating truss sizes, truss positions, bracing, details, etc. to be submitted for approval prior the commencement of any fabrication.	Item		
2/7/2	Design certificate indicating the licensed programme used, SABS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.	Item		
2/7/3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Architect	Item		
	Carried to Trade Summary		R	
	BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>ROOFS, ETC</u>				
	<u>PREFABRICATED ROOF TRUSSES, ETC.</u>				
	<u>Sawn softwood.:</u>				
	Prefabricated timber roof construction complete including purlins, runners, bracing hips, valleys, cleats, purlins, etc.,				
2/7/4	Roof trusses as per suppliers design including all girders, hip, jack and valley trusses, bracing, hangers, cleats, brackets, bolts, etc all as per attached drawing (Wall plates, ceiling brandering and roof tile battens elsewhere measured).			Item	
	<u>Sawn softwood.:</u>				
2/7/5	Wall plate size 38 x 114mm.	m	778		
	<u>DOORS, ETC.</u>				
	<u>SOLID CORE FLUSH DOORS</u>				
	'TDM' or similar and approved Solid flush panel doors with commercial veneer on both sides and hardwood edge strips to vertical edges suitable for painting hung to steel frames (Steel frames measured elsewhere):				
2/7/6	40mm Door 813 x 2032mm high (D08 - Refer to the Door Schedule).	No	11		
2/7/7	40mm Door 900 x 2100mm high (D09 - Refer to the Door Schedule).	No	21		
2/7/8	40mm Door 1000 x 2100mm high (D10 - Refer to the Door Schedule).	No	6		
2/7/9	40mm Door 1600 x 2110mm high (D15 - Refer to the Door Schedule).	No	3		
	<u>Fire doors</u>				
	Carried to Trade Summary				
	BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			R	

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Supply, deliver and install the following complete:				
2/7/10	Class A fire doors, 60min fire rating with weather seal and self-closing, single	No	5.00	
2/7/11	Class A fire doors, 60min fire rating with weather seal and self-closing, double	No	1.00	
2/7/12	Class C fire doors, 120min fire rating with weather seal and self-closing, single	No	5.00	
2/7/13	Class D fire doors, 240min fire rating with weather seal and self-closing, single	No	5.00	
2/7/14	Class D fire doors, 240min fire rating with weather seal and self-closing, double	No	5.00	
Carried to Trade Summary				
BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

	<u>FRAMED WROUGHT HARDWOOD DOORS, ETC.</u>				
	<u>'TDM' or similar and approved Wrought meranti doors hung to steel frames (Timber frames measured elsewhere).:</u>				
2/7/15	40mm Factory rebated framed, ledged and braced batten door 813 x 2032mm high with weather bar (D01 - Refer to the Door Schedule with drawing no. ???).	No	2		
2/7/16	40mm Factory rebated framed, ledged and braced batten door 1613 x 2032mm high with weather bar (D02 - Refer to the Door Schedule with drawing no. ???).	No	3		
2/7/17	40mm Factory rebated framed, ledged and braced batten door 1613 x 2032mm high with weather bar (D06 - Refer to the Door Schedule with drawing no. ???).	No	6		
	<u>SKIRTINGS. ETC.</u>				
	<u>Wrought meranti:</u>				
2/7/18	76 x 19mm Skirting with and including 19mm quarter round quadrant plugged and screwed.	m	469		
	<u>FRAMED FRAMES ETC</u>				
	<u>Wrought meranti.:</u>				
2/7/19	45 x 108mm Door frames.	m	54		
	<u>NOTICE BOARDS, KEYBOARDS, ETC</u>				
	<u>Exterior type particle board</u>				
2/7/20	9mm Pinning board 3,00 x 1,20m high glued to plastered walls.	No	8		
	<u>EAVES, VERGES, ETC.</u>				
	<u>Medium density plain fibre-cement fascias and bargeboards:</u>				
2/7/21	10 x 225mm Fascias boards including galvanised steel H-profile jointing.	m	833		
	<u>Carried to Trade Summary</u>				
	BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	70	
Total Brought Forward from Page No.	71	
Total Brought Forward from Page No.	72	
Total Brought Forward from Page No.	73	
Total Brought Forward from Page No.	74	
Total Brought Forward from Page No.	75	
Total Brought Forward from Page No.	76	
Total Brought Forward from Page No.	77	
Total Brought Forward from Page No.	78	
Total Brought Forward from Page No.	79	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 7		
CARPENTRY AND JOINERY		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>CEILINGS, PARTITIONS, ACCESS</u> <u>FLOORING, ETC.</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions.:</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.</p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

<p><u>Flush plastered suspended ceilings, bulkheads, etc.:</u></p> <p>Descriptions of ceilings, bulkheads, etc are deemed to include for the total design, fabrication, erection, etc of suspension systems, grids, sub-grids, hangers, framing, bracing, etc and for gypsum plasterboard as described fixed with Rhino Drywall screws to tee section Screw-Up suspension system or Drywall steel tracks, studs, rails, braces, etc.</p> <p>All joints in boards are to be covered with 50mm wide self adhesive Fibatape and whole finished with Rhinolite gypsum plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer, including galvanised pressed metal beads, arises to the plaster, etc.</p> <p><u>General.:</u></p> <p>Description of ceilings, bulkheads, etc generally are deemed to include for all necessary bridging, hangers, bracing, etc over and around services, pipes, air-conditioning ducting, etc. occurring within the ceiling and/or bulkhead voids and no claims for extras will be entertained for non co-ordination with other sub-contractors involved in this regard.</p> <p>All work to be executed in strict accordance with the manufacturer's recommendations and carried out by specialist ceiling and bulkhead installers.</p>				
<p>Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				R

	<u>CEILINGS ETC</u>				
	<u>NAILED - UP CEILINGS</u>				
	<u>6.4mm "Rhino" or equal and approved gypsum plasterboard with taped and skimmed joints:</u>				
2/8/1	Ceilings including 38 x 38mm sawn softwood brandering.	m ²	234		
2/8/2	Extra over rhino board ceiling for 600 x 600mm trap door of 38 x 38mm wrot softwood rebated framing with one 38 x 76mm sawn softwood cross brander covered with ceiling board and fitted flush in opening.	No	2		
	<u>9.5mm "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</u>				
2/8/3	Ceilings including 38 x 38mm sawn softwood brandering.	m ²	654		
2/8/4	Extra over rhino board ceiling for 600 x 600mm trap door of 38 x 38mm wrot softwood rebated framing with one 38 x 76mm sawn softwood cross brander covered with ceiling board and fitted flush in opening.	No	7		
	<u>Gypsum cornices.:</u>				
2/8/5	75mm Coved cornice.	m	2 118		
2/8/6	Horizontal bulkhead suspended not exceeding 1m below steel trusses	m ²	741		
2/8/7	Vertical bulkheads suspended not exceeding 1m below steel trusses	m ²	318		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

	<u>SUSPENDED CEILINGS</u>				
	<u>"Daiken Excel-Tone Constellation" or equal and approved Gypsum acoustic Pre-painted tiles 1200 x 600 x 15mm with a white vinyl face backed by special sound absorbent tissue installed in a skimmed plaster floating ceiling configuration on pre-painted exposed tee suspension system including main and cross tees, necessary hangers, grids, etc</u>				
2/8/8	Horizontal ceilings suspended not exceeding 1m below timber trusses	m ²	173		
2/8/9	Horizontal ceilings suspended not exceeding 1m below concrete soffits	m ²	19		
	<u>"Daiken Excel-Tone Constellation" or equal and approved Gypsum acoustic Pre-painted tiles 600 x 600 x 15mm with a white vinyl face backed by special sound absorbent tissue installed in a skimmed plaster floating ceiling configuration on pre-painted exposed tee suspension system including main and cross tees, necessary hangers, grids, etc</u>				
2/8/10	Horizontal ceilings suspended not exceeding 1m below timber trusses	m ²	1 996		
2/8/11	Horizontal ceilings suspended not exceeding 1m below concrete soffits	m ²	222		
	<u>Vinyl faced Gypsum ceiling panels size 600 x 600 x 12,5mm, face covered with white embossed vinyl, laid on fire rated OWA construct S3a exposed demountable T24 suspension system including galvanised main tees and cross tees with main tees suspended by means of galvanised hangers at centres not exceeding 1200mm, all installed to manufacturer's instructions:</u>				
2/8/12	Horizontal ceilings suspended not exceeding 1m below concrete soffits	m ²	822		
	Carried to Trade Summary			R	
BUILDING WORKS					
Bill No. 8					
CEILINGS, PARTITIONS AND ACCESS FLOORING					
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

	<u>Vinyl faced Gypsum ceiling panels size 1200 x 600 x 12,5mm, face covered with white embossed vinyl, laid on fire rated OWA construct S3a exposed demountable T24 suspension system including galvanised main tees and cross tees with main tees suspended by means of galvanised hangers at centres not exceeding 1200mm, all installed to manufacturer's instructions:</u>			
2/8/13	Horizontal ceilings suspended not exceeding 1m below concrete soffits	m ²	265	
	<u>"Pelican" or equal and approved shadowline cornices, perimeter trims, etc. to suspended ceilings:</u>			
2/8/14	24 x 19mm Pre-painted wall angle cornice, plugged.	m	2 108	
	<u>"Lamdaboard" or equal and approved insulation:</u>			
2/8/15	40mm Laminated polyisocyanurate core board, fixed under purlins in between roof trusses and in conjunction with roof coverings. (Branding elsewhere measured).	m ²	5 032	
Carried to Trade Summary				R
BUILDING WORKS Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 8 CEILINGS, PARTITIONS AND ACCESS FLOORING <u>COLLECTION PAGE</u>	Page No	Amount R
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	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 8		
CEILINGS, PARTITIONS AND ACCESS FLOORING		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.9</u></p> <p><u>FLOOR COVERING</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>FLOOR COVERINGS</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>In respect of flame spread, the flooring shall have been fully tested to EN 13501-1 and certified as having Class Bfl-S1, fully tested to ASTM E648 and certified as having passed with a Class 1 rating, making it suitable for use in institutional, commercial and public buildings, have been fully tested for abrasion resistance to the Frick Taber test EN 660-2 and be in abrasion group T, as defined in EN 649, with regards to EN ISO 10581 the product shall be classified Type I, must possess a valid Agreement certificate when laid in accordance with the instructions of Polyflor, using the correct adhesive all with coved skirtings and matching welded joints available in 2.0 metre width, to minimise the number of joints.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 9 FLOOR COVERINGS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>VINYL FLOOR COVERINGS, WALL LININGS, ETC.</u>			
	<u>Forest FX PUR flexible PVC sheet flooring or equal and approved 2.0mm thick homogeneous and monolayer in construction, non-directional design, incorporating a specially formulated polyurethane reinforcement, conforming fully with the requirements of EN 649/EN ISO 10581, have a Use Area Classification of 23/34/43, as defined in EN 685/EN ISO 10874, +/- 15% additional provision to be made for cut and welded vinyl pattern insertion in main vinyl sheeting. (Colour: to be confirmed by the architect)</u>			
2/9/1	On floors	m ²	48	
2/9/2	Turn-ups over coves and up against walls not exceeding 500mm girth	m	47	
	<u>2000 PUR "Classic PUR" flexible PVC sheet flooring or equal and approved 2.0mm thick homogeneous and monolayer in construction, non-directional design, incorporating a specially formulated polyurethane reinforcement, conforming fully with the requirements of EN 649/EN ISO 10581, have a Use Area Classification of 23/34/43, as defined in EN 685/EN ISO 10874, +/- 15% additional provision to be made for cut and welded vinyl pattern insertion in main vinyl sheeting. (Colour: Classic PUR)</u>			
2/9/3	On floors	m ²	41	
2/9/4	Turn-ups over coves and up against walls not exceeding 500mm girth	m	51	
	Carried to Trade Summary			R
BUILDING WORKS Bill No. 9 FLOOR COVERINGS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

	<u>"VOGUE PUR" flexible PVC sheet flooring or equal and approved 2.0mm thick homogeneous and monolayer in construction, non-directional design, incorporating a specially formulated polyurethane reinforcement, conforming fully with the requirements of EN 649/EN ISO 10581, have a Use Area Classification of 23/34/43, as defined in EN 685/EN ISO 10874, +/- 15% additional provision to be made for cut and welded vinyl pattern insertion in main vinyl sheeting. (Colour: to be decided upon by the architect)</u>				
2/9/5	On floors	m ²	1 781		
2/9/6	Turn-ups over coves and up against walls not exceeding 500mm girth <u>"POLYSAFE ULTIMA" flexible PVC sheet flooring or equal and approved 2.0mm thick homogeneous and monolayer in construction, non-directional design, incorporating a specially formulated polyurethane reinforcement, conforming fully with the requirements of EN 649/EN ISO 10581, have a Use Area Classification of 23/34/43, as defined in EN 685/EN ISO 10874, +/- 15% additional provision to be made for cut and welded vinyl pattern insertion in main vinyl sheeting. (Colour: to be decided upon by the architect)</u>	m	1 435		
2/9/7	On floors	m ²	37		
2/9/8	Turn-ups over coves and up against walls not exceeding 500mm girth	m	29		
	<u>POLISH, SEALERS, ETC.</u>				
	<u>Polisher, Sealers, etc.:</u>				
2/9/9	Two coats wax polish on vinyl sheeting and tiles.	m ²	1 907		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 9 FLOOR COVERINGS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC.</u>				
2/9/10	<u>Aluminium strips.:</u> 40mm Flat section straight transition strip at junction of different floor finishes.	m	100		
2/9/11	<u>SKIRTINGS, NOSINGS, ETC</u> <u>Skirtings, Nosings, etc.</u> 100 x 50mm MC17C or equal and approved fully flexible skirtings set in coving with joints welded with matching welding rod and to use cove filler pc20 behind the skirting.	m	1 563		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 9 FLOOR COVERINGS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 9 FLOOR COVERINGS <u>COLLECTION PAGE</u>	Page No	Amount R
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	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 9		
FLOOR COVERINGS		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.10</u></p> <p><u>IRONMONGERY</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Locks.:</u></p> <p>Notwithstanding Clause 4 of the "Ironmongery" trade of the "Standard System of Measuring Building Work", descriptions of locks shall be deemed to include two keys per lock.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 10 IRONMONGERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>Finishes to ironmongery, etc:</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. All locks are Master key operational. All ironmongery is deemed to include fitment of screws that best match the finish of the item specified.			
<u>HINGES, BOLTS, ETC</u>				
	<u>"Union" or similar and approved.:</u>			
2/10/1	75 x 100mm Nylon washered aluminium butts.	No	228	
2/10/2	"Ref. AL8098" Anodised silver finish indicator bolt complete with lock.	Sets	21	
2/10/3	"Ref. 37651AS" Anodised silver finish WC indicator bolt complete with lock.	Sets	6	
2/10/4	"Ref. AL8052-150AS" Anodised silver finished steel flush bolt.	No	15	
	<u>LOCKS</u>			
	<u>"Union" or equal and approved</u>			
2/10/5	Three-lever mortice upright lockset (Code: 2295-76SS) keyed to differ complete with stainless steel forend and rebate conversion set (Code: 2799SC).	No	80	
	<u>Carried to Trade Summary</u>			R
	BUILDING WORKS Bill No. 10 IRONMONGERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/10/6	Cylinder Sash Lock (Code: L-22315-76SS) with stainless steel forend complete with rebate conversion set (Code: 2799SC).	No	77			
2/10/7	Cylinder Sash Lock (Code: L-2209-78SS) with stainless steel forend complete with rebate conversion set (Code: 2799SC).	No	8			
2/10/8	65mm five pin Euro-profile Double Cylinder Key to Differ (Code: 2X18SCMKD).	No	88			
2/10/9	Round Cylinder escutcheon (Code: DCE-002 SS)	Pairs	14.0			
2/10/10	Round Cylinder escutcheon (Code: 5305-05SS)	Pairs	6.0			
2/10/11	Two point locking panic bar - Double door - Door leaf 813mm wide x 2032mm high (808-2200) with 'Pullman' latch, black brackets and red horizontal push bar.	Pairs	8.0			
<u>HANDLES</u>						
<u>"Union" or similar and approved.:</u>						
2/10/12	"Gower" or similar and approved handle on 152 x 41mm rectangular backplate (Code: 682-24CH).	Pairs	20.0			
2/10/13	"Waterbok" or similar and approved handle on 150 x 150mm backplate (Code: AL6W20-05AS) with an anodised silver finish.	Pairs	88.0			
2/10/14	Premium steel lever handle complete with cylinder escutcheon (Code: M4tech).	Sets	11			
2/10/15	Sandpiper lever handle with stainless steel finish (Code: 6104-06SS).	Sets	6.0			
<u>PUSH PLATES AND KICKING PLATES</u>						
<u>"Geze" or similar and approved.:</u>						
2/10/16	813 x 500 x 2mm Thick stainless steel kick plate.	No	124			
2/10/17	160 x 300 x 2mm Thick stainless steel push plate.	No	71			
Carried to Trade Summary						
BUILDING WORKS Bill No. 10 IRONMONGERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

	<u>DOOR CLOSERS</u>				
2/10/18	<p><u>Dormakaba or equal and approved</u></p> <p>Non Hold Open Cam action slide channel door closer, Max door width 1100mm with Closing Force EN 2-4V. Adjustable strength, Hydraulic speed control, Push-side door leaf fixing (Standard), Pull side transom fixing including angle bracket, all in full compliant with EN 1154. Door closer to be Certi Fire approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240. Certified manufacturer to ISO 9001. (Code: TS92G - AB - SL)</p>	Sets	34.0		
2/10/19	<p>Non Hold Open Co-ordinated door closer system for rebated doors between 1500-2200mm. Closing Force EN 2-4. Adjustable strength. Hydraulic speed control. Max door width 1100mm per leaf. Push-side fixing. (Angle bracket included). Door closer compliant with EN 1154. Door co-ordinators tested to EN 1158. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240. Certified manufacturer to ISO 9001 (Code: TS92G G-SR BG + Angle Bracket)</p>	Sets	4.0		
2/10/20	<p><u>"Geze" or similar and approved.:</u></p> <p>Adjustable power regular arm overhead door closer (Code: 781) complete with standard guide rail (Code: AZ1503).</p>	No	33		
2/10/21	<p>Adjustable power regular arm overhead delayed door closer (Code: TS4000S) complete with parallel arm (Code: AZ4001DA).</p>	No	5		
	<u>CATCHES, CABIN HOOKS, ETC</u>				
2/10/22	<p><u>"Union" or similar and approved.:</u></p> <p>"Ref. AL8722AS" Stainless steel hat and coat hook with rubber buffer.</p>	No	21		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 10 IRONMONGERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>LETTERS, NAMEPLATES, ETC</u>				
<u>"Geze" or similar and approved.:</u>					
2/10/23	"Ref. GEP15069E/F" 160 x160 x 1.2mm Thick stainless steel female toilet indicator sign.	No	5		
2/10/24	"Ref. GEP15069E/M" 160 x160 x 1.2mm Thick stainless steel male toilet indicator sign.	No	6		
2/10/25	"Ref. GEP15069E/P" 160 x160 x 1.2mm Thick stainless steel paraplegic toilet indicator sign.	No	2		
2/10/26	"Ref. GEP15069E/E" 160 x160 x 1.2mm Thick stainless steel Electrical sign.	No	2		
<u>"Union" or similar and approved.:</u>					
2/10/27	Union AL5066-06ASE05 fire hose reel indicator plate.	No	5		
2/10/28	Union AL5066-06ASE06 fire extinguisher indicator plate.	No	10		
2/10/29	Union AL5066-06ASE15 fire escape indicator plate.	No	21		
2/10/30	Union AL5066-06ASE15 Exit indicator sign.	No	5		
<u>SUNDRIES</u>					
<u>"Union" or similar approved.:</u>					
2/10/31	"Ref. AL8730AS" Stainless steel door stop with a silver finish, plugged.	No	78		
2/10/32	Stainless steel door stop plugged (Code: 8700SS)	No	17		
<u>BATHROOM FITTINGS</u>					
<u>"Serra Rol TR1 SD1310" or similar and approved toilet roll holders.:</u>					
2/10/33	130 x 265mm High locking single toilet paper holder plugged (Code: TR1 SD1310).	No	2		
<u>Carried to Trade Summary</u>					
BUILDING WORKS Bill No. 10 IRONMONGERY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

	<u>"Serra Rol TR3 SD1310" or similar and approved toilet roll holders.:</u> 130 x 375mm High locking single toilet paper holder plugged (Code: TR3 SD1310).	No	36			
2/10/34	<u>"Franke" or similar and approved.:</u>					
2/10/35	"Code CNTX BR - 359910" Stainless steel back rail plugged.	No	2			
2/10/36	"Code: CNTXPAR" Angle bar grab rail plugged.	No	2			
	<u>"Franke Stratos STRX610" or equal and approved sanitary towel waste bins.:</u>					
2/10/37	205 x 134 x 305mm High x 1,2/1,5mm thick satin finished stainless steel sanitary towel disposal bin (Code: 359740) with a capacity of 3,8 litres, plugged and screwed to the wall with stainless steel screws.	No	9			
	<u>"Franke Stratos STRX605" similar and approved waste bins.:</u>					
2/10/38	300 x 270 x 520mm High x 1,2/1,5mm thick satin finished stainless steel waste bin (Code: 359730) with a capacity of 34 litres and cylinder lock with standard "Franke" or similar and approved key, plugged and screwed to the wall with stainless steel screws.	No	50			
	<u>"Frank Stratos RODX600" or similar and approved paper towel dispensers, etc.:</u>					
2/10/39	355 x 275 x 112mm x 0.8mm thick satin finished stainless steel paper towel dispenser including a cylinder lock with standard "Franke" or similar and approved key and mounting hardware, plugged and screwed to the wall with stainless steel screws.	No	55			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 10 IRONMONGERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>"Frank Stratos STRX618" or similar and approved soap dispensers, etc.:</u>				
2/10/40	100 x 134 x 304mm High x 1,2/1,5mm thick satin finished stainless steel soap dispenser (Code: 359705) including a replaceable and refillable 1 litre container, cylinder lock with standard "Franke" or similar and approved key, plugged and screwed to the wall with stainless steel screws.	No	26		
2/10/41	163 x 100 x 304mm High x 1,2/1,5mm thick satin finished stainless steel double arm soap dispenser (Code: 2120089) including a replaceable and refillable 1 litre container, cylinder lock with standard "Franke" or similar and approved key, plugged and screwed to the wall with stainless steel screws.	No	26		
2/10/42	163 x 100 x 304mm High x 1,2/1,5mm thick satin finished stainless steel hand sanitizer dispenser elbow operated, including a replaceable and refillable 500ml container, cylinder lock with standard "Franke" or similar and approved key, plugged and screwed to the wall with stainless steel screws.	No	14		
	<u>"Serra" or similar and approved air freshners, etc.:</u>				
2/10/43	90 x 65 x 200mm High "Air plus 2 shadow line" air freshener including a replaceable and refillable 1 litre container, cylinder lock with standard "Serra" or similar and approved key, plugged and screwed to the wall with stainless steel screws.	No	40		
2/10/44	230 x 80 x 135mm Condom dispenser, plugged and screwed to the wall with stainless steel screws.	No	2		
	<u>"Franke HF2400HD" similar and approved hand dryers.:</u>				
2/10/45	280 x 207 x 245mm High x 1,2/1,5mm thick satin finished stainless steel automatic hands free hand dryer (Code: 359961) with a capacity of 200W motor connected to 230/240 volt power supply, including 2 vandal proof lock screws and key wrench, plugged and screwed to the wall with stainless steel screws. Hand dryer to have a 5 year warranty plan.	No	5		
	Carried to Trade Summary				
	BUILDING WORKS Bill No. 10 IRONMONGERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

	<u>"Koala" or similar and approved air baby changing stations, etc.:</u> 894 x 565mm High polypropylene surface mounted horizontal baby changing station (Code: KB200 - Grey).	No	3			
2/10/46	<u>"Frank" or similar and approved wall benches, work tops, etc.:</u> 1850 x 650mm High x 1,2/1,5mm thick satin finished stainless steel wall bench (Code: 2620117) including a 150mm high integral splash back to rear and left hand side and 50 x 10mm turn down all round.	No	1			
2/10/47	1850 x 650mm High x 1,2/1,5mm thick satin finished stainless steel work top (Code: 2620103) including a 50 x 10mm turn down all round.	No	2			
2/10/48	2400 x 650mm High x 1,2/1,5mm thick satin finished stainless steel work top (Code: 2620108) including a 50 x 10mm turn down all round.	No	1			
2/10/49						
	Carried to Trade Summary					
BUILDING WORKS Bill No. 10 IRONMONGERY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R		

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 10 IRONMONGERY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	92	
Total Brought Forward from Page No.	93	
Total Brought Forward from Page No.	94	
Total Brought Forward from Page No.	95	
Total Brought Forward from Page No.	96	
Total Brought Forward from Page No.	97	
Total Brought Forward from Page No.	98	
Total Brought Forward from Page No.	99	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 10		
IRONMONGERY		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.11</u></p> <p><u>METALWORK</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES:</u></p> <p><u>Descriptions.:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p>Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.</p> <p style="text-align: right;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 11 METALWORK DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>GALVANIZED STEEL HANDRAILS, BALUSTRADING, ETC</u>				
<u>Welded handrails to brick walls:</u>					
2/11/1	50mm External diameter 4mm thick continuous pipe rails.	m	125		
2/11/2	Raking 50mm external diameter 4mm thick continuous pipe rails.	m	30		
2/11/3	Extra over steel handrails for rounded end.	No	10		
2/11/4	Hole through 4mm steel for bolt	No	50		
2/11/5	12mm Expansion bolts.	No	120		
<u>Welded balustrading to walls:</u>					
2/11/6	Balustrading to walls formed of 50mm diameter circular section continuous top rail, 10mm diameter intermediate balusters at 100mm centres between top and bottom rails and 40mm circular section posts at approximately 700mm centres each with 100 x 100 x 4mm flat section base plate bolted to concrete (bolts elsewhere).	m	15		
2/11/7	Raking balustrading to steps and landings formed of 50mm diameter circular section continuous top rail, 10mm diameter intermediate balusters at 100mm centres between top and bottom rails and 40mm circular section posts at approximately 700mm centres each with 100 x 100 x 4mm flat section base plate bolted to concrete (bolts elsewhere).	m	30		
2/11/8	Extra over balustrading for rounded end to top-rail.	No	31		
2/11/9	Extra over balustrading for ramp or knee.	No	5		
2/11/10	Extra over balustrading for bend.	No	5		
2/11/11	Hole through 4mm steel for bolt.	No	56		
2/11/12	12mm Expansion bolts.	No	56		
Carried to Trade Summary					
BUILDING WORKS Bill No. 11 METALWORK DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

	<u>MILD STEEL GATES, SCREENS, ETC</u>				
	<u>Welded gates, screens, etc.:</u>				
2/11/13	Screen 1892 x 2072mm high overall, comprising 60 x 60 x 2mm mild steel square tube frame all round with mitred corners and 60 x 60 x 2mm mild steel square tubing placed horizontally in the middle of each leaf complete with standard galvanized weld mesh, and hung on three approved heavy duty hinges welded to 150 x 60 x 12mm mild steel plates bolted to brickwork.	No	2		
2/11/14	12mm Chemical anchor.	No	12		
2/11/15	"CISA Security" or similar and approved 22mm gate lock (Code: 42032) complete with cylinder (Code: OG345-05), striker plate (Code: 06079-20) and a 22mm rose set (Code: 06012-00) fitted in a 25 x 110mm high metal weld-on box (Code: 423MB).	No	2		
	<u>STEEL ROLLER SHUTTERS, ETC.</u>				
	<u>Mild steel roller shutters, guides, canopy cover(s), etc., fixed to brick jambs and concrete lintel over.:</u>				
2/11/16	Between walls push-up roller shutter for 1500mm wide x 2110mm high opening with 75 x 0.8mm thick slates, ratchet for spring winder, neoprene weather strip to bottom edge and two barrel bolts (Type 14 as per Architects Door Schedule with drawing no: ???).	No	1		
	<u>PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
	<u>1.6mm Thick presses mild steel.:</u>				
2/11/17	Double door 1525 x 2135mm high each leaf complete with 450 x 652mm high louvred ventilation panel and rebated frame (Louvre else where measured) (Please refer to the Door Schedule with drawing no. 500 - D08).	No	2		
	<u>Carried to Trade Summary</u>			R	
	BUILDING WORKS Bill No. 11 METALWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>STEEL STRONGROOM DOORS, ETC</u>			
2/11/18	<p><u>Light duty strongroom doors etc suitable for 230mm openings fixed to concrete walls:</u></p> <p>Light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall supplied and erected in place complete including all necessary ironmongery. (Ironmongery elsewhere measured). (Type D19 - As per Gate Schedule drawing no. RHE/BT/2020/WD/DS/BA01).</p>	No	2	
2/11/19	<p><u>Sundries.</u></p> <p>255 x 255mm Double ended strongroom ventilator size with telescopic sleeve, gauze and baffle plates, drop shutter, etc.</p>	No	3	
	<u>PRESSED STEEL DOOR FRAMES</u>			
2/11/20	<p><u>1.6mm Standard pressed steel double rebated frames suitable for half brick walls.:</u></p> <p>Frame for door 813 x 2 032mm high.</p>	No	32	
2/11/21	<p><u>1.6mm Standard pressed steel double rebated frames suitable for one brick walls.:</u></p> <p>Frame for door 813 x 2 032mm high.</p>	No	17	
2/11/22	<p>Frame for door 900 x 2 032mm high.</p>	No	6	
2/11/23	<p>Frame for door 1 600 x 2 110mm high.</p>	No	18	
	Carried to Trade Summary			R
	BUILDING WORKS Bill No. 11 METALWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>PURPOSE MADE ALUMINIUM APPROVED DOORS, SHOPFRONTS AND WINDOWS, FRAMES AND FIXED SECTIONS, WITH GLAZING IN ACCORDANCE WITH SANS 10400 CODE OF PRACTICE PART N, THE FRAMES OF 76 X 25 MM HOLLOW SECTIONS FIXED IN OPENINGS IN BRICKWORK OR TO STRUCTURAL STEEL, IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.</u>			
	<p>Tenderers are advised to acquaint themselves with the Architect's window and door schedules with drawing numbers (Attached to this BOQ) respectively before pricing this section. Should there be any discrepancies between these bills of quantities and the architect's window and door schedules, the architect's window and door schedule shall take precedence over these bills of quantities.</p> <p>No claim of any nature whatsoever will be considered after submission of this tender, due to the failure of the contractor to fulfil the aforementioned obligation.</p> <p><u>The following glazed with 4mm Low-E clear/obscure/frosted glass, with gasket and powder coated glazing beads unless otherwise described. All glazing to comply with SABS 0137 and SANS 10400.:</u></p>			
2/11/24	Windows, lintols, internal and external cills, reveals, sealants, glass and paint.	m ²	850	
2/11/25	Shopfronts, shop entrances, doors, stall board risers and bulkheads above including finishes and appurtenant sundry builder's work	m ²	127	
	<u>ALUMINIUM LOUVRE PANELS</u>			
	<u>Alania Aerofoil A230 or equal and approved Aluminium louvre units with blade pitch of 230mm screwed walls</u>			
2/11/26	Louvre unit for 650 x 650mm high opening horizontal louvres	No	2	
	Carried to Trade Summary			R
	BUILDING WORKS Bill No. 11 METALWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 11 METALWORK <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	101	
Total Brought Forward from Page No.	102	
Total Brought Forward from Page No.	103	
Total Brought Forward from Page No.	104	
Total Brought Forward from Page No.	105	
Total Brought Forward from Page No.	106	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 11		
METALWORK		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.12</u>			
	<u>PLASTERING</u>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.			
	<u>SCREEDS</u>			
	<u>Screeds on concrete.:</u>			
2/12/1	30mm Thick on floors and landings.	m ²	656	
	<u>Self-levelling screeds applied with adjustable leveller followed by spike roller on concrete.:</u>			
2/12/2	2.5mm Thick on floors and landings.	m ²	2 226	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork:</u>			
2/12/3	On walls.	m ²	16 585	
2/12/4	On narrow widths.	m ²	131	
	<u>Gypsum skim plaster on concrete:</u>			
2/12/5	On concrete ceilings.	m ²	2 313	
2/12/6	On projecting and isolated beams	m ²	265	
	<u>Carried Forward to Summary of Section No.</u>			R
	BUILDING WORKS Bill No. 12 PLASTERING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.13</u></p> <p><u>TILING</u></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Fixing.:</u></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>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the range of products as recommended by the manufacturer of the tiles.</p> <p style="text-align: right;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 13 TILING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

	<u>WALL TILING</u>				
2/13/1	<u>600 x 400mm Porcelain tiles (PC R600m² supply and delivery) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted jointing compound:</u>				
	On walls.	m ²	2 519		
2/13/2	<u>300 x 300mm Mosaic tiles (Prime Cost of R1000/m² supply and delivery) bedded in 20mm solid approved tile cement adhesive with joints filled solidly to brickwork:</u>				
	On walls.	m ²	300		
	<u>FLOOR TILING</u>				
2/13/3	<u>300 x 300mm Non-slip full body porcelain tiles (PC R450/m² for supply and delivery) fixed with adhesive to screed (Screed measured elsewhere) and flush pointed with tinted jointing compound.:.</u>				
2/13/4	On floors and landings.	m ²	656		
2/13/4	75mm High skirting.	m	840		
	<u>Sundries:</u>				
2/13/5	PVC tile edge trim to wall tiles.	m	413		
	Carried to Trade Summary				
BUILDING WORKS					
Bill No. 13					
TILING					
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					
				R	

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Section No. 2			
BUILDING WORKS			
Bill No. 13			
TILING			
<u>COLLECTION PAGE</u>			
	Page No		Amount R
Total Brought Forward from Page No.	109		
Total Brought Forward from Page No.	110		
Carried Forward to Summary of Section No.			
BUILDING WORKS			
Bill No. 13			
TILING			
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.14</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>'Polycop' polypropylene pipes.:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with 'Fast-fuse' heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated.</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions.</p> <p>All pipe diameters are nominal external.</p> <p align="center">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

<p><u>uPVC pipes and fittings.:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed.</p> <p><u>Copper pipes.:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be 'Cobra Watertech' type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.</p> <p><u>Fixing of pipes.:</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level.</p> <p><u>Reducing fittings.:</u></p> <p>Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm 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. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.</p> <p><u>Excavations.:</u></p> <p>No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.</p> <p>'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.</p>	<p>R</p>
<p>Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>	

<p><u>Laying, backfilling, bedding, etc of pipes.:</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SAB.</p> <p><u>Flush pans.:</u></p> <p>Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.:</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.</p> <p><u>Waste unions.:</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.</p>				
Carried to Trade Summary			R	

BUILDING WORKS

Bill No. 14

PLUMBING AND DRAINAGE

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

<p><u>WATER TANK AND TOWER</u></p> <p>Tank</p> <p>Tanks are to be manufactured from standard steel panels 1220 x 1220 x 4,5mm thickness using the "Abeco externally bolted pressed steel sectional tank system" or other equal approved. All stays, rubber gaskets, sealants, bolts and nuts to assemble a watertight tank are to be supplied. Cover plates to form a roof over the tank are to be supplied with one lockable access manhole 500 x 500mm with built-in screened vent per compartment. Tank to have one internal catladder per compartment and one external ladder with safety cage with three rest platforms equally positioned over the full height. Tank shall be supplied with one level indicator per compartment as well as pipe connection points in positions specified by the Project Engineer.</p>				
<p>Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R	

<p>Support Structure</p> <p>The support structure shall be designed by a registered professional Engineer and shall be in accordance with SABS 0160 and 0162. The nominal self-weight loads, live and wind loads must be calculated in terms of SABS 0160. The applicable terrain category for wind shall be taken as Category 2 (undeveloped outskirts of towns and suburbs). The maximum height to the top of the support structure shall be taken as 20m. A surge load due to water surging as tower sways under wind load must be allowed for.</p> <p>A full load of reactions (service loads) imposed on the foundations separated into dead, live, wind and surge for shear, positive axial, negative axial as applicable must be provided by the supplier in order that the Project Engineer may design and provide the concrete bases.</p> <p>A full perimeter walkway with balustrading shall be provided to access the elevated tank.</p> <p>Workshop drawings of the tank and support structure (including base plate details) to be approved by the Project Engineer shall be prepared prior to the commencement of the fabrication and all prices shall be deemed to include the cost of workshop drawings and the cost of the registered professional Engineer.</p>			
	Materials		
	All steelwork to be hot dipped galvanised in accordance with SABS 763.		
2/14/1	150KL water tank on and including 20m high structure erected complete on concrete bases (elsewhere measured).	No	1
<p><u>Testing And Commissioning</u></p> <p>Provide equipment, fill tank and perform water tightness test.</p>			
2/14/2		Item	
<p><u>RAINWATER GOODS, ETC</u></p>			
<p style="text-align: center;">Carried to Trade Summary</p> <p>BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			

	<u>Galvanised mild steel gutter and rainwater pipes:</u>					
2/14/3	150 x 125 x 0,9mm Thick pre-coated "Ogee" profile zincalume seamless roof gutters.	m	833			
2/14/4	Extra over gutter for angle.	No	158			
2/14/5	Extra over gutter for stopped end.	No	79			
2/14/6	Extra over gutter for 160mm diameter outlet.	No	79			
2/14/7	160mm Diameter rainwater pipes.	m	395			
2/14/8	Extra over rainwater pipe for bend.	No	158			
2/14/9	Extra over rainwater pipe for shoe.	No	79			
<u>SANITARY FITTINGS</u>						
	<u>"Franke Model" or similar and approved pressed stainless steel.:</u>					
2/14/10	"Nouveau" or similar and approved inset double bowl sink and drainer 800 x 460mm wide, fitted to counter top. (counter top elsewhere measured). (Code: 1990001).	No	4			
2/14/11	Bedpan and wash-up sink with outlets, and draining board, all set up and fixed complete to brick wall. (Code: 350052).	No	1			
2/14/12	Stainless steel inset vanity basin fixed to the wall with brackets (Code: RONDO360).	No	2			
2/14/13	"Model S2" Center catering double sink size 1850 x 650mm x 1.2mm thick stainless steel with a 150mm high integral splash back to rear and 50 x 10mm turn down with a beaded edge on the remaining sided mounted securely with wall brackets (Code: 353358).	No	5			
2/14/14	"Model CH", 540 x 540mm slop hopper with 100mm high splash-back to rear and both sides, and grid including Cobra Model FM1.000-35mm flush valve with straight chromium plated flush pipe (Code: FJT 1.2) and wall brackets bolted to wall.	No	2			
Carried to Trade Summary						
BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/14/15	"Model SMS", 665 x 554 x 258mm deep surgeon mini scrub sink complete with integral splash back with tap holes for a medical elbow action and wall brackets bolted to wall. <u>"Vaal" or similar approved.:</u>	No	8			
2/14/16	550 x 400mm "Springbok" white vitreous china lavatory wash hand basin (Code: 703102) with stand, two tap hole plugs including integrated overflow and chain stay hole, bolted to wall with bracket (Code: 8118ZO) and sealed with silicone sealant where basin meets wall.	No	37			
2/14/17	630 x 500mm "Sola 630" white vitreous china rectangular wash hand basin (Code: 702800), with no tap hole, overflow or chainstay hole plugs bolted to wall and sealed with silicone sealant where basin meets wall.	No	16			
2/14/18	"Hibiscus Elite" close coupled 90 degree outlet open rim front single flush suite complete with lid and fitments (code 751400), top dual flush suite 9 litres (Code 7116SC) with jazz thermoset toilet seat (code 8531Z0).	No	30			
2/14/19	"Protea paraplegic" Vitreous China semi-close coupled suite (Code: 750200) comprising 90 degree outlet open rim wash down pan and matching 9 litre cistern (Code: 7116LP) complete with lid, fitments and purpose-made chromium plated side flush lever and purpose made thermoset seat and cover plate.	No	2			
2/14/20	600 x 385 x 380mm "Lavatera" white vitreous china wall mounted urinal (Code: 705462) including 38mm chromium plated domical grating (Code: 8787Z0 and chromium plated top inlet spreader (Code: 8543Z0), fixed on and including two hanger brackets (Code: 8127Z0).	No	23			
2/14/21	White vitreous china wall mounted urinal divider mounted to wall. (Code: 705200WH).	No	23			
	<u>WASTE UNIONS, ETC.</u>					
	<u>"Cobra Watertech" or similar approved:</u>					
2/14/22	32mm Basin waste with plug and chain.	No	53			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

2/14/23	40mm Chrome brass bath / sink waste union with plug. <u>TRAPS, ETC.</u> <u>'Plumbcrazy' traps or other approved uPVC.:</u>	No	22			
2/14/24	40mm "P" or "S" trap.	No	54			
2/14/25	32mm Chrome plated bottle trap with 75mm deep re-seal, adjustable telescopic pipe and 32mm outlet.	No	98			
2/14/26	40mm Bath/shower trap complete with overflow outlet and pipe	No	3			
	<u>TAPS, VALVES, ETC.</u>					
	<u>"Cobra" or equal and approved valves, flush pipes, etc.:</u>					
2/14/27	Chrome plated exposed flush valve, with top entry, flush pipe, wall flange, rubber buffer, and integral vacuum breaker. SANS 1240. (Code: FM1.000).	No	2			
2/14/28	Standard Flushmaster toilet flush valve, exposed type, chrome. Includes: top entry, flush pipe, compression pan connector, integral vacuum breaker, control stopper, and non-hold open feature. SANS 1240. (Code: Fm1-210).	No	32			
2/14/29	15mm (Code: FJ6-000) BSP exposed, chrome plated, DZR brass urinal flush valve complete with flow control, strainer and no-hold feature.	No	23			
	<u>"Franke Model" or equal and approved taps, etc.:</u>					
2/14/30	Chrome plated Aqualine-S metering bib tap (Code: AQUA205).	No	3			
	<u>"Cobra" or equal and approved taps, etc.:</u>					
2/14/31	"Model 508" 15mm Chrome plated elbow action medical mixer.	No	8			
	Carried to Trade Summary					
	BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/14/32	15mm Chrome plated elbow action ceramic mixer complete with turn disc with swivel outlet (1/2") fixed male connection inlets with 178mm centres (Code: 515/055-21).	No	23			
2/14/33	"Capstan" or similar approved swivel sink mixer - one hole (Code: CS-296CP).	No	4			
2/14/34	Chrome plated pillar tap with over arm swivel spout (Code: CP171/041), pillar mixer with retractable hand-spray and 15mm bedpan nozzle spray (Code: CP297).	No	1			
2/14/35	Elbow action pillar tap with raised nose and red indice complete with a quarter turn ceramic disc and half BSP male connection inlet (Code: 503-21R).	No	2			
2/14/36	Elbow action pillar tap with raised nose and blue indice complete with a quarter turn ceramic disc and half BSP male connection inlet (Code: 503-21B).	No	2			
2/14/37	Pillar tap with hot and cold indices (Code: CS-212-15CP).	No	35			
2/14/38	"Cobra" or similar approved 15mm Stopcock as Cobra 131	No	135			
<u>Floor Drains:</u>						
2/14/39	"Rofo" or equal and approved RO 280 V NW 100 round stainless steel floor drain cast into concrete floor and jointed to PVC pipe.	No	6			
<u>FULBORE OUTLETS</u>						
<u>Cast Iron:</u>						
2/14/40	100mm Fulbore 45 degree type outlet jointed to 80mm PVC pipe including adaptor and embedded in concrete slab.	No	8			
<u>SANITARY PLUMBING (PROVISIONAL)</u>						
<u>uPVC pipes:</u>						
2/14/41	40mm Pipes fixed to or chased into brickwork.	m	254			
Carried to Trade Summary						
BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/14/42	50mm Pipes fixed to or chased into brickwork.	m	225			
2/14/43	110mm Pipes fixed to or chased into brickwork.	m	160			
<u>Extra over uPVC pipes for fittings.:</u>						
2/14/44	40mm Bend.	No	51			
2/14/45	50mm Bend.	No	75			
2/14/46	40mm Junction.	No	51			
2/14/47	50mm Junction.	No	150			
2/14/48	110mm End cap.	No	20			
2/14/49	110mm Access bent pan connector.	No	32			
2/14/50	110mm Access bend.	No	15			
2/14/51	110mm Access junction.	No	20			
2/14/52	110mm Access bent pan connector.	No	32			
2/14/53	40mm 'GI Two-way' vent anti-vac valve.	No	30			
<u>Pre-cast concrete gulleys.:</u>						
2/14/54	Gully not exceeding 500mm deep.	No	40			
<u>Sundries.:</u>						
2/14/55	Testing waste pipe system.	Item				
<u>WATER AND FIRE SUPPLIES</u>						
<u>Class 2 copper pipes.:</u>						
2/14/56	15mm Pipes chased into brick walls.	m	638			
2/14/57	22mm Pipes chased into brick walls.	m	1 161			
2/14/58	22mm Pipes laid in and including trenches.	m	2 133			
<u>Carried to Trade Summary</u>						
BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

2/14/59	35mm Pipes laid in and including trenches.	m	500			
<u>Extra over class 2 copper and polypropylene pipes for brass compression fittings.:</u>						
2/14/60	15mm Fittings.	No	1 307			
2/14/61	22mm Fittings.	No	699			
2/14/62	35mm Elbow.	No	130			
2/14/63	35mm Bend	No	50			
2/14/64	35mm Tee	No	50			
2/14/65	35mm Reducing tee	No	70			
<u>Extra over class 2 copper pipes for capillary fittings:</u>						
2/14/66	15mm Fittings.	No	511			
2/14/67	22mm Fittings.	No	699			
<u>Lagging</u>						
2/14/68	Heavy brown paper loosely wrapped around 15mm pipe as sheath for expansion.	m	425			
2/14/69	Ditto, but around 22mm pipe.	m	425			
2/14/70	Thermaflex preformed polyethylene foam lagging or similar approved insulation wrapped around 15mm pipe and fittings.	m	425			
<u>Hot Water Cylinders, Heat Pumps, Etc</u>						
2/14/71	2,5 Litre Zip Hydroboil code 2610007 with white epoxy powder coated finish including all joints to copper pipes, fixing to wall and connecting up.	No	2			
2/14/72	7,5 Litre Zip Hydroboil code 2610011 with white epoxy powder coated finish including all joints to copper pipes, fixing to wall and connecting up.	No	2			
<u>Carried to Trade Summary</u>						
BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

2/14/73	200 Litre white enamelled Kwikot Meagflo horizontal wall mounted type electric hot water copper cylinder with 20mm connections and fitted with monel metal electrical element complete with vacuum breakers, pressure reducing valve and relief valve including all joints to copper pipes and fixing in position to wall with four 10 x 76mm expanding bolts in mortices in wall and connect up.	No	5			
2/14/74	0,60mm Galvanised sheet iron tray to suit 200 litre geyser with riveted and soldered seams and joints, turned up all round to form kerb 75mm high with beaded edge, including outlet with nozzle for 50mm diameter overflow pipe and fix in position.	No	5			
2/14/75	40mm PVC overflow and fixing to falls to roof timbers.	m	20			
2/14/76	Extra for 40mm bend.	No	6			
2/14/77	38mm Sawn Pine boarding for geyser platform formed of 38 x 228mm boards butt-jointed and nailed to bearers.	m ²	50			
2/14/78	38 x 114mm Sawn Pine bearers.	m	120			
2/14/79	Hole through IBR roof sheeting for copper water pipe not exceeding 50mm diameter and flash and seal all around.	No	40			
<u>FIRE SERVICE</u>						
<u>Fire Fighting Equipment</u>						
<u>Supply, deliver and install the following Fire extinguisher</u>						
2/14/80	4.5kg DCP with backing boards	No	10.00			
2/14/81	Photoluminescent signage			SUM		
<u>Fire hose reels</u>						
2/14/82	25mm x 30mL fire hose reels	No	5.00			
2/14/83	Photoluminescent signage			SUM		
Carried to Trade Summary						
BUILDING WORKS Bill No. 14						
PLUMBING AND DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						
R						

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

	<u>Fire hydrant</u>				
2/14/84	65mm fire hydrant complete with boosters and valves	No	2.00		
2/14/85	Photoluminescent signage			SUM	
	<u>Piping</u>				
	<u>Supply, deliver and Install pipework complete with supports and accessories:Medium grade, seamless galvanised mild steel</u>				
2/14/86	25mm dia piping including painting	m	210.00		
2/14/87	65mm dia piping including painting	m	283.00		
	<u>ALUMINIUM SHOWER DOORS</u>				
2/14/88	1 200 X 1 810mm high Natural aluminium pivot hinged framed shower door set with 4mm armour plated frosted glass.	No	3		
	<u>PIPE PROTECTION</u>				
	<u>"Densyl Tape"</u>				
2/14/89	Wrapping around 22mm pipe including couplings	m	493		
	<u>Carried to Trade Summary</u>				
	BUILDING WORKS				
	Bill No. 14				
	PLUMBING AND DRAINAGE				
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	112	
Total Brought Forward from Page No.	113	
Total Brought Forward from Page No.	114	
Total Brought Forward from Page No.	115	
Total Brought Forward from Page No.	116	
Total Brought Forward from Page No.	117	
Total Brought Forward from Page No.	118	
Total Brought Forward from Page No.	119	
Total Brought Forward from Page No.	120	
Total Brought Forward from Page No.	121	
Total Brought Forward from Page No.	122	
Total Brought Forward from Page No.	123	
Total Brought Forward from Page No.	124	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 14		
PLUMBING AND DRAINAGE		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.15</u>			
	<u>GLAZING</u>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.			
	<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>			
	<u>6.50mm Normal strength (NS) clear laminated safety glass.:</u>			
2/15/1	Panes exceeding 0,1m ² and not exceeding 0.5m ² .	m ²	90	
2/15/2	Panes exceeding 0,5m ² and not exceeding 2m ² .	m ²	210	
	<u>BATHROOM FITTINGS</u>			
	<u>Franke or equal and approved mirrors.:</u>			
2/15/3	380 x 600 x 6mm Mirror with concealed resistant fixings screwed to wall with stainless steel screws.	No	34	
	<u>Carried Forward to Summary of Section No.</u>			
	BUILDING WORKS Bill No. 15 GLAZING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.16</u></p> <p><u>PAINTWORK</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>COLOURS</u></p> <p>Unless otherwise described, all paintwork shall be deemed to have a colour value in excess of 7 the Munsel system in accordance with SANS 1091</p> <p><u>PAINTWORK, ETC. TO NEW WORK</u></p> <p><u>ON FLOATED PLATSER</u></p> <p><u>Prepare and apply one coat ecosure alkaline resistant primer and two coats "PVA" anti bacterial/stain resistant emulsion paint for interior use, on:</u></p>			
2/16/1	On internal walls.	m ²	4 037	
	Carried to Trade Summary			R
	BUILDING WORKS Bill No. 16 PAINTWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>Prepare and apply one coat professional gypsum and plaster primer and two coats professional super matt paint for interior use, on.:</u>				
2/16/2	On skimmed ceilings and beams.	m ²	265		
	<u>Prepare and apply one coat professional gypsum and plaster primer and two coats professional super matt paint for exterior use, on.:</u>				
2/16/3	On skimmed ceilings and beams	m ²	265		
	<u>Two coats Epoxy paint on:</u>				
2/16/4	Screeded floors.	m ²	319		
	<u>ON PLASTER BOARD</u>				
	<u>Prepare and apply one coat Primer, one coat alkali based universal undercoat and two coats superior quality universal enamel paint.:</u>				
2/16/5	Ceilings and cornices.	m ²	888		
	<u>ON METAL SURFACES</u>				
	<u>Prepare and apply one coat universal undercoat and two coats 'Plascon' superior quality universal enamel paint, on galvanised steel, etc.:</u>				
2/16/6	On door frames.	m ²	268		
	<u>ON WOOD</u>				
	<u>Stop, sand down and prepare wood surfaces and apply one coat pink wood primer and two coats 'Plascon' velvaglo on.:</u>				
2/16/7	On exterior doors.	m ²	134		
2/16/8	On interior doors.	m ²	171		
	Carried to Trade Summary				
	BUILDING WORKS Bill No. 16 PAINTWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

	<u>Stop, sand down and prepare wood surfaces and apply three coats 'Plascon Woodcare Exterior Wood Dressing' or equal and approved stained oil preservative or equal and approved stained oil on.:</u>				
2/16/9	On skirtings, rails, etc not exceeding 300 mm girth.	m	469		
	<u>PAINTWORK, ETC. TO PREVIOUSLY PAINTED SURFACES</u>				
	<u>ON FLOATED PLASTER</u>				
	<u>Prepare and brush to remove all loose contaminants, apply one coat Plasconguard Gehopon 7 sealer or equal and approved primer and two coats Plasconguard Gehopon 3000 WB or equal and approved on plastered walls:</u>				
2/16/10	On interior walls.	m ²	9 859		
	<u>ON METAL SURFACES</u>				
	<u>Remove all loose, defective paint and rust, sand down, clean with solvent wash, spot priming bare patches with primer and apply one coat universal undercoat and two coats non-drip polyurethane enamel paint on existing alkyd-based paint steel surfaces:</u>				
2/16/11	On steel window frames.	m ²	106		
	<u>ON WOODEN SURFACES.</u>				
	<u>Stop, fill, sand down and prepare wood surfaces and apply one coat 'Plascon Oil Wood Primer' or equal and approved, one coat 'Plascon Merit Universal Undercoat' or equal and approved and two coats' Plascon Super Universal Enamel' or equal and approved paint on:</u>				
2/16/12	On interior doors.	m ²	141		
2/16/13	On exterior doors.	m ²	60		
	Carried to Trade Summary			R	
	BUILDING WORKS Bill No. 16 PAINTWORK <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 2 BUILDING WORKS Bill No. 16 PAINTWORK <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	127	
Total Brought Forward from Page No.	128	
Total Brought Forward from Page No.	129	
Carried Forward to Summary of Section No.		R
BUILDING WORKS		
Bill No. 16		
PAINTWORK		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Bill No	Section No. 2 BUILDING WORKS <u>SECTION SUMMARY - BUILDING WORKS</u>	Page No		Amount R
2/1	ALTERATIONS	43		
2/2	EARTHWORKS	50		
2/3	CONCRETE, FORMWORK AND REINFORCEMENT	58		
2/4	MASONRY	63		
2/5	WATERPROOFING	66		
2/6	ROOF COVERINGS	69		
2/7	CARPENTRY AND JOINERY	80		
2/8	CEILINGS, PARTITIONS AND ACCESS FLOORING	86		
2/9	FLOOR COVERINGS	91		
2/10	IRONMONGERY	100		
2/11	METALWORK	107		
2/12	PLASTERING	108		
2/13	TILING	111		
2/14	PLUMBING AND DRAINAGE	125		
2/15	GLAZING	126		
2/16	PAINTWORK	130		
Carried to Final Summary				R
BUILDING WORKS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.3</u></p> <p><u>ELECTRICAL INSTALLATION</u></p> <p><u>BILL NO. 1: PRELIMINARIES</u></p> <p><u>PREAMBLES TO BILLS OF QUANTITIES</u></p> <p><u>These Bills of Quantities contain pages numbered consecutively.</u></p> <p><u>Before the Tenderer submits his quote he should check the number of pages, and if any are found missing or duplicated, or the figures or writing indistinct, he should apply to the Engineer at once and have same rectified as no liability whatsoever will be admitted by the Engineer in respect of errors in tender due to the foregoing.</u></p> <p><u>The Bills of Quantities form part of and must be read in conjunction with the Specification, which document contains the full description of the work to be done and material and equipment to be used and unless otherwise described in the Bills of Quantities, reference should be made to the Specification for the full meaning of descriptions of work to be done and materials and equipment to be used in this service.</u></p> <p><u>All item rates and extensions must be priced in detail before submission of quotations</u></p> <p><u>The total quoted price in the bill shall constitute the contract price of the successful Tenderer.</u></p> <p><u>Contractors are advised to check their item extensions and total additions, as no claim for arithmetical errors will be considered.</u></p> <p align="center">Carried to Trade Summary</p> <p>ELECTRICAL INSTALLATION Bill No. 1 PRELIMINARIES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

No alteration, erasure or addition is to be made in the text of the Bills of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bills of Quantities will be adhered to.

The priced Bills of Quantities of the successful contractor will be checked and the Engineer reserves the right to call for adjustments to any individual price and to rectify any discrepancy whilst the Total Quoted Price, as submitted, remains unaltered.

The responsibility for the accuracy of the quantities written into the Bills remains with the person who prepared the Bills. The Tenderer shall be relieved of responsibility of measuring quantities at the tender stage, and the tender sum submitted shall be in respect of the quantities set out in the Bills, although he will be required to make his assessment of items such as brackets, fixings, etc., from details stated in the Bills and shall include in the item price for such small installation materials as are required for the complete installation in accordance with the Specification.

The quantities in these Bills of Quantities are provisional and are not to be used for ordering materials.

Variations in the scope and extent of the work included in the Bills shall be allowed to meet the Employer's requirements and shall be measured and costed at rates entered in the Bills, where appropriate, and shall form an addition to or deduction from the total of the Bills. Any items or variation for which rates have not been included in the Bills shall be agreed and priced as non-scheduled items in accordance with the provisions of the contract.

Unless a separate rate for the supply and for the installation of any items is specifically called or, the supply and installation costs of any item shall be fully included in the unit price.

Carried to Trade Summary

ELECTRICAL INSTALLATION

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivery, unloading storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates, plant, temporary works, return of packings, establishment charges, profit and all other obligations arising out of the Conditions of Contract.

All measurements are nett, unless otherwise stated, and Tenderers must allow in the rate for wastage.

Hangars, supports, splices, joining drilling etc shall form part of unit rate.

All materials or equipment specified under a trade name, catalogue or reference number shall, for competitive tender pricing, be exactly as described in this tender.

PREAMBLES

CABLE DUCT

Description of Cable duct shall be deemed to include cable duct joints, fittings, supports, brackets, painting, etc

P 9000 WIRING CHANNEL

Descriptions of wiring channel shall be deemed to include joints or screwed connections to channel, brackets painting, supports, etc.

Assembling

Descriptions of manufactured items shall be deemed to include for complete assembling and handing over in a proper working order.

Pricing

Carried to Trade Summary

ELECTRICAL INSTALLATION

Bill No. 1

PRELIMINARIES

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

	<u>It is expected from the Tenderer to price each individual item in this bill of quantities and no alterations, omissions or additions shall be made to the bill or specification.</u>				
	<u>Value Added Tax (VAT)</u>				
	<u>Prices for individual items in this bill must be exclusive of VAT. Provision has been made in the Final Summary of this bill for the lump sum addition of VAT.</u>				
	<u>GENERAL</u>				
	<u>Commissioning & Testing</u>				
3/1/1	Allowance for the inspection, commissioning and applicable testing of the entire installation as described. (Including Certificate of Compliance)		Item		
	<u>Preliminaries</u>				
3/1/2	Engineering, contract administration and contract management		Item		
3/1/3	Liaison and co-ordination with other services		Item		
	<u>Guarantee</u>				
3/1/4	Allowance for 12 month guarantee as described		Item		
	<u>Maintenance, and service</u>				
3/1/5	Allowance for maintenance and service to the installation as described (12 months)		Item		
	<u>Manuals</u>				
3/1/6	Allowance for the provision of operating and maintenance manuals (4 sets). (Drawings in electronic Autocad format in addition to hard copies in O & M manuals)	Sets	4.0		
	<u>Drawings</u>				
3/1/7	Allowance for working drawings (Autocad)		Item		
	<u>Carried to Trade Summary</u>			R	
	ELECTRICAL INSTALLATION Bill No. 1 PRELIMINARIES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/1/8	Allowance for as built drawings (Autocad)	Item			
3/1/9	Electrical Certificate of Compliance	Item			
3/1/10	SITE ESTABLISHMENT Delivery, hoisting, rigging, Scaffolding	Item			
3/1/11	Tenderers to allow for all costs which may be required in order to place the necessary facilities on site for safe storage and orderly management purposes for the duration of the contract			SUM	
3/1/12	Compliance with the OHS Act	Item			
3/1/13	Allow an amount for the Site Establishment	No	1		
3/1/14	Site Store and Storeman	No	1		
3/1/15	Security	No	1		
3/1/16	Site Office	No	1		
3/1/17	Transport Material to Site	No	1		
Carried to Trade Summary					
ELECTRICAL INSTALLATION Bill No. 1 PRELIMINARIES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 3 ELECTRICAL INSTALLATION Bill No. 1 PRELIMINARIES <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	132	
Total Brought Forward from Page No.	133	
Total Brought Forward from Page No.	134	
Total Brought Forward from Page No.	135	
Total Brought Forward from Page No.	136	
Carried Forward to Summary of Section No.		R
ELECTRICAL INSTALLATION		
Bill No. 1		
PRELIMINARIES		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>SECTION NO.3</u>			
	<u>ELECTRICAL INSTALLATION</u>			
	<u>BILL NO.1</u>			
3/2/1	Low Voltage Cabling Low-Voltage (LV) Cables - supply and install 600/1000V PVC/PVC/SWA/PVC copper cable laid in trenches or fixed to cable trays (cable trays measured elsewhere) 300mm ² 4-core cable	m	30	
3/2/2	240mm ² 4-core cable	m	1	
3/2/3	185mm ² 4-core cable	m	20	
3/2/4	150mm ² 4-core cable	m	30	
3/2/5	120mm ² 4-core cable	m	20	
3/2/6	95mm ² 4-core cable	m	40	
3/2/7	70mm ² 4-core cable	m	120	
3/2/8	50mm ² 4-core cable	m	20	
3/2/9	35mm ² 4-core cable	m	80	
3/2/10	25mm ² 4-core cable (to cater for mechanical equipment)	m	100	
3/2/11	16mm ² 4-core cable (to cater for mechanical equipment)	m	200	
3/2/12	10mm ² 4-core cable (to cater for mechanical equipment)	m	150	
3/2/13	6mm ² 4-core cable (to cater for mechanical equipment)	m	400	
	Carried to Trade Summary			R
	ELECTRICAL INSTALLATION Bill No. 2 ELECTRICAL SITE RECTICULATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/2/14	Cable Terminations - supply and install cable terminations for 600/1000V PVC/PVC/SWA/PVC copper cables Cable Terminations - supply and install cable terminations for 600/1000V PVC/PVC/SWA/PVC copper cables 300mm ² 4-core cable	m	2			
3/2/15	240mm ² 4-core cable	m	2			
3/2/16	185mm ² 4-core cable	m	2			
3/2/17	150mm ² 4-core cable	m	4			
3/2/18	120mm ² 4-core cable	m	4			
3/2/19	95mm ² 4-core cable	m	4			
3/2/20	70mm ² 4-core cable	m	4			
3/2/21	50mm ² 4-core cable	m	20			
3/2/22	35mm ² 4-core cable	m	10			
3/2/23	25mm ² 4-core cable (to cater for mechanical equipment)	m	6			
3/2/24	16mm ² 4-core cable (to cater for mechanical equipment)	m	6			
3/2/25	10mm ² 4-core cable (to cater for mechanical equipment)	m	6			
3/2/26	6mm ² 4-core cable (to cater for mechanical equipment)	m	6			
3/2/27	10mm ² 4-core cable (to cater for mechanical equipment)	No	6			
3/2/28	Earthing - bare copper earth conductor installed and strapped to cable (cable measured elsewhere) and building earthing 70mm ² BCEW	m	100			
3/2/29	50mm ² BCEW	m	120			
3/2/30	25mm ² BCEW	m	20			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 2 ELECTRICAL SITE RECTICULATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/2/31	16mm ² BCEW	m	80			
3/2/32	16mm ² BCEW	m	36			
3/2/33	10mm ² BCEW	m	58			
3/2/34	6mm ² BCEW	m	58			
3/2/35	Earth Conductor Termination - termination for bare insulated copper conductors including lugs and connections 50mm ² BCEW	No	2			
3/2/36	25mm ² BCEW	No	2			
3/2/37	16mm ² BCEW	No	2			
3/2/38	16mm ² BCEW	No	2			
3/2/39	10mm ² BCEW	No	2			
3/2/40	6mm ² BCEW	No	6			
3/2/41	Sleeves - Sleeve piping including short lengths and jointing, laid in trench (trench filling measured elsewhere) 32mm diameter sleeve	m	150			
3/2/42	50mm diameter sleeve	m	300			
3/2/43	110mm diameter sleeve	m	150			
3/2/44	Manholes with Covers 600mm x 600mm x 800mm (deep) manholes	No	22			
3/2/45	Medium duty covers for 600mm x 600mm manholes	No	12			
3/2/46	Excavation of cable and sleeve pipe trenches including bedding, covering, backfilling and compaction Pickable Soil	m ³	600			
3/2/47	Soft Rock	m ³	600			
3/2/48	Hard Rock	m ³	600			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 2 ELECTRICAL SITE RECTICULATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/2/49	Sundries Cable warning tape placed 300mm above cables in excavations	m	200			
3/2/50	Concrete Plinths for Distribution Kiosks	No	5			
3/2/51	Concrete Cable Markers	No	30			
3/2/52	Luminaries - Supply and install luminaries or equipment complete with lamps, connections, etc as described in the Lighting Schedule National 16A photocell unit with bracket	No	8			
3/2/53	Surfix Cables 2,5mm ² 2-core surfix cable	m	300			
3/2/54	4mm ² 2-core surfix cable	m	400			
3/2/55	6mm ² 4-core surfix cable	m	444			
3/2/56	Other Key padlocks for all the distribution kiosks, switchgear, gates, doors, etc	No	5			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 2 ELECTRICAL SITE RECTICULATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

		Page No	Amount R
Section No. 3			
ELECTRICAL INSTALLATION			
Bill No. 2			
ELECTRICAL SITE RECTICULATION			
<u>COLLECTION PAGE</u>			
Total Brought Forward from Page No.		138	
Total Brought Forward from Page No.		139	
Total Brought Forward from Page No.		140	
Total Brought Forward from Page No.		141	
Carried Forward to Summary of Section No.			
ELECTRICAL INSTALLATION			
Bill No. 2			
ELECTRICAL SITE RECTICULATION			
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			
		R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Item No		Quantity	Rate	Amount R
3/3/1	Sleeves - Sleeve piping including short lengths and jointing, laid in trench (trench filling measured elsewhere) 50mm diameter sleeve	m	500	
3/3/2	110mm diameter sleeve	m	500	
3/3/3	Distribution Boards - Supply and install distribution boards complete with sheet metal tray, frames, sub-frames, bus-bars, provision for 30% future circuit breakers and legend card as per line diagram Distribution Boards	No	10	
3/3/4	Conduits and Accessories - chased into walls or fixed in ceiling voids 20mm diameter PVC conduit	m	3 000	
3/3/5	25mm diameter PVC conduit	m	2 500	
3/3/6	Conduit Boxes and Fittings - chased into walls or fixed in ceiling voids 100mm x 100mm x 50mm Deep 3 Gang sub divisional Galvanised box.	No	600	
3/3/7	60mm Round Conduit Box	No	600	
3/3/8	100mm x 50mm x 50mm Deep Galvanised Box	No	350	
3/3/9	100mm x 100mm x 50mm Deep Galvanised Box	No	400	
3/3/10	Conductors - bare stranded copper earth conductor drawn into wireways 2,5mm ²	m	8 000	
3/3/11	4mm ²	m	7 500	
3/3/12	PVC Insulated stranded copper conductor drawn into wireways 2,5mm ²	m	4 000	
3/3/13	4mm ²	m	3 750	
3/3/14	6mm ²	m	250	
Carried to Trade Summary				R
ELECTRICAL INSTALLATION Bill No. 3 SMALL POWER & LIGHTING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/3/15	Surfix Cables 2,5mm ² 2-core surfix cable	m	450			
3/3/16	4mm ² 2-core surfix cable	m	500			
3/3/17	6mm ² 2-core surfix cable	m	450			
3/3/18	Wired mesh cable tray with Hold down brackets and suspension accesories including tees,bends and junctions, fixed to purlines or in ceiling voids 200mm Wide Cable Tray	m	600			
3/3/19	Wiring Channel - galvanized steel channel complete with cover plates suspended from steel trusses or concrete slab including hangers or steel cables, complete with splices, bends, tees and junctions. P1000 Channel	m	680			
3/3/20	P9000 Channel	m	3 000			
3/3/21	P9000 Distribution Board Outlet	m	3 000			
3/3/22	300mm x 19mm heavy duty cable tray	m	400			
3/3/23	41mm x 41mm galvanized wiring channel	m	400			
3/3/24	127 x 76mm white epoxy coated wiring channel	m	350			
3/3/25	Single 200mm Cantilever Arm	No	30			
3/3/26	Power-Skirting(Cabstrut AL 801 Similar or Equal) 2-compartment 2 Cover Powerskirting (Hospital Grey)	m	650			
3/3/27	Accessories for Power-Skirting: 2-Compartment End Cap	No	18			
3/3/28	2-Compartment 90° Bend	No	3			
3/3/29	16A Three-pin normal socket outlet (White outlet with White Cover)	No	41			
3/3/30	16A Three-pin normal socket outlet (Red outlet with Red Cover)	No	41			
3/3/31	RJ-45 Data Outlet	No	21			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 3 SMALL POWER & LIGHTING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

3/3/32	RJ-11 Telephone Outlet	No	21			
3/3/33	Euro Two Pin Plug(Blue Outlet)	No	21			
<u>Horizontal Services Providers</u>						
3/3/34	Light Switches - Flush switch with white cover plate and chrome screws in a box measured elsewhere; 16A 1-lever 1-way switch	No	420			
3/3/35	16A 1-lever 2-way switch	No	350			
3/3/36	Light Sensor	No	45			
3/3/37	16A 1-lever IP 66 switch	No	25			
3/3/38	National 16A photocell unit with bracket	No	3			
3/3/39	Switched Socket Outlets - Flush switched socket outlets with cover plate and chrome screws, mounted in a box measured elsewhere; 16A NormalSingle Switched Socket Outlet(White Cover with White Socket Outlet)	No	320			
3/3/40	16A Normal Double Switched Socket Outlet (White Cover with White Socket Outlet)	No	150			
3/3/41	16A Normal Switched Socket Outlet with Euro 2 Pin on UPS (Red Cover with Blue Socket Outlet)	No	90			
3/3/42	RJ-45 Data Outlet and RJ-11 Telephone RJ Socket Outlet complete with Yoke.	No	90			
3/3/43	Power Outlets - complete with white cover plates and chrome screws and mounted in an outlet box 60A double pole isolator mounted in IP 65 outdoor utility box for single phase HVAC units	No	65			
3/3/44	60A double pole isolator mounted in IP 65 outdoor utility box for single phase supply to Heat Pump	No	65			
3/3/45	60A triple pole isolator mounted in IP 65 outdoor utility box for three phase HVAC units	No	65			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 3 SMALL POWER & LIGHTING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/3/46	60A double pole isolator mounted in ceiling for single phase Extraction Fan units	No	65			
3/3/47	20A double pole isolator mounted in ceiling on P9000 trunking for single phase HVAC Cassette units and BC boxes	No	65			
3/3/48	20A double pole isolator mounted on kitchen wall for hydroboil	No	2			
3/3/49	Luminaries - Supply and install luminaries or equipment complete with lamps, connections, etc as described in the Lighting Schedule TYPE B1	No	290			
3/3/50	TYPE B	No	128			
3/3/51	TYPE D1	No	180			
3/3/52	TYPE F1	No	46			
3/3/53	TYPE P1	No	35			
3/3/54	TYPE HM1	No	2			
3/3/55	TYPE ST1	No	18			
3/3/56	Lightning Protection			SUM		
3/3/57	Communication System - This contract shall only make provision for the installation of conduit, draw-wire, distribution panels and draw-boxes. The installation of the system and cable shall be done by others. Supply and install Telkom DB 600mm x 600mm x 150mm complete with architrave frame, wooden backing and doors	No	12			
3/3/58	Supply and install galvanised draw-wire in all conduits and sleeve pipes 1,6mm diameter steel draw wire	m	1 373			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 3 SMALL POWER & LIGHTING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 3 ELECTRICAL INSTALLATION Bill No. 3 SMALL POWER & LIGHTING <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	143	
Total Brought Forward from Page No.	144	
Total Brought Forward from Page No.	145	
Total Brought Forward from Page No.	146	
Carried Forward to Summary of Section No.		R
ELECTRICAL INSTALLATION		
Bill No. 3		
SMALL POWER & LIGHTING		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Item No		Quantity	Rate	Amount R
	<u>Access Control (Provision of conduits to be made available by the electrical contractor)</u>			
3/4/1	Keypad access control system	No	40	
3/4/2	3amp Power Supply Unit	No	15	
3/4/3	Batteries	No	10	
3/4/4	Electric maglock, be fitted with mag release units on door linked to fire alarm to release on first knock when fire alarm activates	No	35	
3/4/5	Control panel up to 30 readers, to be installed in the Watch Room	No	35	
3/4/6	Green MCP	No	12	
3/4/7	Mylar Cable	m	1 200	
3/4/8	Crimps	No	13	
3/4/9	Electric Siren 15Watt	No	25	
3/4/10	Electric Siren Push Button NO/NC	No	35	
3/4/11	Emergency Button NO/NC	No	35	
3/4/12	Testing and Commissioning			SUM
3/4/13	Training of Employer's Site Staff			SUM
3/4/14	As Built Drawings & Manuals			SUM
3/4/15	2 month maintenance, after sales support and guarantee			SUM
3/4/16	Supply and installation of CCTV			SUM
3/4/17	The contractor shall allow for all items not specifically mentioned above in order to provide a complete working solution as per the specifications			SUM
	Carried Forward to Summary of Section No.			R
	ELECTRICAL INSTALLATION Bill No. 4 ACCESS CONTROL SYSTEM <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
	<u>FIRE DETECTION</u>			
3/5/1	Addresable Fire Detection Control Panel up to 6 zones	No	6	
3/5/2	Ionized Detectors with LED complete with Base plates	No	145	
3/5/3	Loop Sounders/Sirens	No	40	
3/5/4	Addressable Break glass at Emergency Escapes	No	52	
3/5/5	FR20 Fire Cable Installed in conduits	m	6 000	
3/5/6	Installing and Commissioning		Item	
	<u>Conduit</u>			
	<u>Conduit placed in position for casting in concrete or screed, for building or chasing in concrete or brickwork, and surface mounting In ceiling voids including bending, short lengths, drawboxes, couplings, bends, tees and hospital saddles. 1mm galvanised draw wire shall be installed in wireways for other services</u>			
3/5/7	25mm galvanised conduit inclusive of axillary fittings	m	1 800	
3/5/8	20mm PVC Conduit inclusive of axillary fittings	m	600	
3/5/9	Provide manuals and technical literature for the system and its components		Item	
3/5/10	Any additional items required for the succesful completion of the above	No	1	
	Carried Forward to Summary of Section No.			R
	ELECTRICAL INSTALLATION			
	Bill No. 5			
	FIRE DETECTION SYSTEM			
	DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
	<u>NURSES CALL SYSTEM</u>			
3/6/1	Provide the sum of R600000 for Installation of Nurse Call Systems	Item		
3/6/2	Contractors Markup	Item		
3/6/3	Contractors Attendance	Item		
3/6/4	Provisional Amount for IT Installation	Item		
	<u>Provisional Amount for Public Address Installation</u>			
	<u>Carried Forward to Summary of Section No.</u>			
	ELECTRICAL INSTALLATION			
	Bill No. 6			
	NURSES CALL SYSTEM			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			
			R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
	<u>Contractors Markup</u>			
3/7/1	Provide the sum of R6000000 for upgrade of MV and LV Switchgear System	Item		
3/7/2	Contractors Markup	Item		
3/7/3	Contractors Attendance	Item		
3/7/4	Allow for electrical connection application to the supply authority	Item		
3/7/5	Contractors Markup	Item		
3/7/6	Contractors Markup	Item		
3/7/7	200kVA SDEC Silent Diesel Generator 3-Phase	No	5	
3/7/8	UPS(10KVA-30KVA)	No	6	
	<u>Carried Forward to Summary of Section No.</u>			
	ELECTRICAL INSTALLATION Bill No. 7 MV SWITCHGEAR SYSTEM <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
<u>Contractors Markup</u>				
<u>Block A</u>				
3/8/1	Examination Light - Ceiling Mount (2.7m)	No	4	
3/8/2	LED X-Ray Viewing Screen Wall 2 Plate 780x532	No	4	
<u>Block C</u>				
3/8/3	Single Mount, Double Articulated Arm	No	1	
3/8/4	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1	
3/8/5	X-Ray Viewing Screen Wall 2 Plate 960x429	No	1	
3/8/6	Horizontal Bedhead Service System	No	1	
3/8/7	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1	
3/8/8	X-Ray Viewing Screen Wall 2 Plate 960x429	No	1	
3/8/9	Examination Light - Ceiling Mount (2.7m)	No	1	
3/8/10	LED X-Ray Viewing Screen Wall 2 Plate 780x532	No	1	
3/8/11	Horizontal Bedhead Service System	No	1	
3/8/12	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1	
3/8/13	LED X-Ray Viewing Screen Wall 2 Plate 780x532	No	1	
3/8/14	Horizontal Bedhead Service System	No	4	
<u>Block D</u>				
3/8/15	Examination Light - Ceiling Mount (2.7m)	No	2	
<u>Carried to Trade Summary</u>				
ELECTRICAL INSTALLATION Bill No. 8 BEDHEAD UNITS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				
R				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/8/16	LED X-Ray Viewing Screen Wall 2 Plate 780x532	No	2			
3/8/17	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	2			
3/8/18	Single Mount, Double Articulated Arm	No	2			
3/8/19	Single Mount, Double Articulated Arm	No	2			
3/8/20	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	2			
3/8/21	Floor Standing Pedestal with Rotary Table	No	2			
3/8/22	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	3			
3/8/23	Colour adj, Single Procedure Light	No	3			
3/8/24	Horizontal Bedhead Service System	No	3			
3/8/25	Examination Light - Rail Mount with RSA Standard Plug	No	1			
3/8/26	Horizontal Bedhead Service System	No	4			
3/8/27	Examination Light - Rail Mount with RSA Standard Plug	No	1			
3/8/28	Horizontal Bedhead Service System	No	1			
3/8/29	Horizontal Bedhead Service System	No	3			
3/8/30	Examination Light - Rail Mount with RSA Standard Plug	No	1			
3/8/31	Horizontal Bedhead Service System	No	4			
3/8/32	Examination Light - Rail Mount with RSA Standard Plug	No	2			
3/8/33	Horizontal Bedhead Service System	No	1			
3/8/34	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 8 BEDHEAD UNITS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

3/8/35	X-Ray Viewing Screen Wall 2 Plate 960x429	No	1			
3/8/36	Single Mount, Double Articulated Arm	No	1			
3/8/37	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1			
3/8/38	X-Ray Viewing Screen Wall 2 Plate 960x429	No	1			
3/8/39	Single Mount, Double Articulated Arm	No	1			
3/8/40	Ceiling Mtd, 100k lux, Colour adj, Single Procedure Light	No	1			
3/8/41	Horizontal Bedhead Service System	No	1			
3/8/42	Examination Light - Rail Mount with RSA Standard Plug	No	3			
3/8/43	Horizontal Bedhead Service System	No	1			
3/8/44	Horizontal Bedhead Service System	No	1			
3/8/45	Installation Sundries	No	3			
Carried to Trade Summary						
ELECTRICAL INSTALLATION Bill No. 8 BEDHEAD UNITS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 3 ELECTRICAL INSTALLATION Bill No. 8 BEDHEAD UNITS <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	152	
Total Brought Forward from Page No.	153	
Total Brought Forward from Page No.	154	
Carried Forward to Summary of Section No.		R
ELECTRICAL INSTALLATION Bill No. 8 BEDHEAD UNITS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Item No		Quantity	Rate	Amount R
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Electrical installation bill and specifications are as provided by 2BLN cc, any queries related to the following bill should be addressed to the responsible Electrical engineer:</u>			
	<u>SOLAR SYSTEM</u>			
3/9/1	Provide the amount of R3,000,000.00 (Three Million Rands) for the supply and installation of a Solar System.	Item		3 000 000.00
3/9/2	Profit on above item.	Item		
3/9/3	Attendance on Ditto.	Item		
	<u>SURVEILLANCE</u>			
3/9/4	Provide the sum of R650,000.00 (Six Hundred Fifty Thousand Rand) for Surveillance installation supplied and fixed complete.	Item		650 000.00
3/9/5	Allow for general attendance on ditto.	Item		
3/9/6	Allow for profit if required.	Item		
	<u>TV</u>			
3/9/7	Provide the sum of R250,000.00 (Two Hundred Fifty Thousand Rand) for TV installation supplied and fixed complete.	Item		250 000.00
3/9/8	Allow for general attendance on ditto.	Item		
3/9/9	Allow for profit if required.	Item		
	<u>ICT</u>			
3/9/10	Provide the sum of R4,750,000.00 (Four Million Seven Hundred Fifty Thousand Rand) for ICT installation supplied and fixed complete.	Item		4 750 000.00
3/9/11	Allow for general attendance on ditto.	Item		
	Carried to Trade Summary			
	ELECTRICAL INSTALLATION Bill No. 9 PROVISIONAL SUMS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

3/9/12	Allow for profit if required.	Item			
<u>BULK SUPPLY</u>					
3/9/13	Allow a Provisional Sum for Sub-Station Upgrade and Servicing; Connection based on Tariff Plan and bulk Engineering Contributions to Local Energy Metropolitan Municipality including connection to supply connection.			SUM	
3/9/14	Supply and install municipal bulk metering LV Panel as per schematic diagram. The Metering Panel to comply with the local municipality specifications and statutory requirements. The rate shall include meter and plinth.	No	1.00		
3/9/15	Supply and install main Outdoor weatherproof LV Panel (DB-GEN) as per schematic diagram. The rate shall include plinth.	No	1.00		
<u>Carried to Trade Summary</u>					
ELECTRICAL INSTALLATION Bill No. 9 PROVISIONAL SUMS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Section No. 3			
ELECTRICAL INSTALLATION			
Bill No. 9			
PROVISIONAL SUMS			
<u>COLLECTION PAGE</u>			
	Page No		Amount R
Total Brought Forward from Page No.	156		
Total Brought Forward from Page No.	157		
Carried Forward to Summary of Section No.			R
ELECTRICAL INSTALLATION			
Bill No. 9			
PROVISIONAL SUMS			
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Bill No	Section No. 3	ELECTRICAL INSTALLATION	Page No	Amount R
<u>SECTION SUMMARY - ELECTRICAL INSTALLATION</u>				
3/1	PRELIMINARIES		137	
3/2	ELECTRICAL SITE RECTICULATION		142	
3/3	SMALL POWER & LIGHTING		147	
3/4	ACCESS CONTROL SYSTEM		148	
3/5	FIRE DETECTION SYSTEM		149	
3/6	NURSES CALL SYSTEM		150	
3/7	MV SWITCHGEAR SYSTEM		151	
3/8	BEDHEAD UNITS		155	
3/9	PROVISIONAL SUMS		158	
Carried to Final Summary				
ELECTRICAL INSTALLATION				
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Item No		Quantity	Rate	Amount R
	<u>PRELIMINARY & GENERAL</u>			
	<u>Fixed Cost Items (SABS 1500 sa 8.3)</u>			
4/1/1	Contract Requirements		SUM	
	<u>Site Establishment</u>			
4/1/2	Office & Stores		SUM	
4/1/3	Workshop		SUM	
4/1/4	Ablutions & Latrines		SUM	
4/1/5	Water, Electricity and Telephone connections		SUM	
4/1/6	Removal of Contractor's site facilities upon completion		SUM	
	<u>Variables with Contract Period (SABS 1500 SA 8.4)</u>			
4/1/7	Contractual Requirements		SUM	
4/1/8	Operate and maintain facilities on site as per site establishment items		SUM	
4/1/9	Company Head Office overhead costs		SUM	
	<u>Supervision</u>			
4/1/10	Labour		SUM	
4/1/11	building contract so that each Contractor has access. Allow for disruptions as may occur arising from jointly working on the site. No claims for delays or associated P&G costs will be entertained		SUM	
	<u>COMPLIANCE</u>			
4/1/12	Quality & Scope of Work	Item		
4/1/13	Compliance with Regulations and Standards	Item		
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION			
	Bill No. 1			
	HVAC INSTALLATION			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/14	Compliance with OHS Regulations (latest version)	Item			
4/1/15	Clearing of rubble	Item			
4/1/16	Supports	Item			
4/1/17	Scaffolding	Item			
4/1/18	Protection against corrosion	Item			
4/1/19	Protection of Equipment against damage during construction	Item			
4/1/20	Programming and phasing of work on a live site	Item			
4/1/21	Transport and delivery	Item			
4/1/22	Rigging and crane hire	Item			
4/1/23	Guarantee of Equipment as per specification	Nr	24		
4/1/24	Maintenance of Equipment as per specification	No	60		
4/1/25	Training of end user as specified	Item			
4/1/26	Provision of spare parts and all related accessories	Item			
4/1/27	Builders work as required	Item			
4/1/28	Electrical work as required	Item			
4/1/29	Workshop Drawings	Item			
4/1/30	Testing, balancing and commissioning	Item			
<u>Equipment Instructions laminated, bound together and inserted in holder inside outer panel door.</u>					
4/1/31	O & M manuals including as built drawings in hard copy and on memory stick	Sets	3.0		
4/1/32	2 Year Service during guarantee period	Item			
<u>GROUND FLOOR</u>					
<u>Carried to Trade Summary</u>					
MECHANICAL INSTALLATION					
Bill No. 1					
HVAC INSTALLATION					
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

	<u>DUCT SYSTEMS</u>				
	<u>RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u>				
	<u>Rectangular galvanised sheet metal low pressure ducting and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>				
4/1/33	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	m ²	25		
4/1/34	Category 2 - Un-insulated Galvanised Sheet Metal Ducting	m ²	26		
4/1/35	Category 3 - Un-insulated Galvanised Sheet Metal Ducting	m ²	139		
	<u>Extra Over Fittings For Rectengular/Square Ducting.</u>				
4/1/36	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	40		
4/1/37	Category 2 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	6		
4/1/38	Category 3 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	12		
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>				
4/1/39	Ø100mm Un-insulated Spigot	m	5		
4/1/40	Ø150mm Un-insulated Spigot	m	2		
4/1/41	Ø200mm Un-insulated Spigot	m	20		
4/1/42	Ø350mm Un-insulated Spigot	m	4		
	Carried to Trade Summary				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/43	Ø700mm Un-insulated Spigot	m	12			
<u>Extra Over Fittings For Round Ducting Ducting.</u>						
4/1/44	Ø100mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	m	2			
4/1/45	Ø150mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	m	2			
4/1/46	Ø200mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	m	22			
4/1/47	Ø350mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	m	2			
4/1/48	Ø700mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	m	6			
<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>						
4/1/49	Ø100mm Un-insulated flexible duct	m	2			
4/1/50	Ø150mm Un-insulated flexible duct	m	2			
4/1/51	Ø200mm Un-insulated flexible duct	m	25			
4/1/52	Ø350mm Un-insulated flexible duct	m	4			
4/1/53	Ø700mm Un-insulated flexible duct	m	12			
<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>						
4/1/54	Category 1 - Insulated Galvanised Sheet Metal Ducting	m ²	90			
4/1/55	Category 2 - Insulated Galvanised Sheet Metal Ducting	m ²	50			
4/1/56	Category 3 - Insulated Galvanised Sheet Metal Ducting	m ²	146			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

	<u>Extra Over Fittings For Rectengular/Square Ducting.</u> <u>Ducting Fittings rate to include insulation</u>				
4/1/57	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	28		
4/1/58	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	5		
4/1/59	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	6		
4/1/60	Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation Ø150mm Insulated Spigot	m	10		
4/1/61	Ø200mm Insulated Spigot	m	10		
4/1/62	Ø250mm Insulated Spigot	m	11		
4/1/63	Ø300mm Insulated Spigot	m	18		
4/1/64	Ø350mm Insulated Spigot	m	6		
4/1/65	Ø400mm Insulated Spigot	m	2		
	<u>Extra Over Fittings For Round Ducting Ducting.</u> <u>Ducting Fittings rate to include insulation.</u>				
4/1/66	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	6		
4/1/67	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	10		
4/1/68	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	8		
4/1/69	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	17		
	Carried to Trade Summary			R	
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

4/1/70	Ø350mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5	
4/1/71	Ø400mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2	
<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>				
4/1/72	Ø150mm Insulated flexible duct	m	5	
4/1/73	Ø200mm Insulated flexible duct	m	17	
4/1/74	Ø250mm Insulated flexible duct	m	12	
4/1/75	Ø300mm Insulated flexible duct	m	14	
4/1/76	Ø350mm Insulated flexible duct	m	8	
4/1/77	Ø400mm Insulated flexible duct	m	4	
<u>AIR CONTROL DAMPERS</u>				
4/1/78	400x400mm Air Control Damper c/w lockable quadrant	No	1	
4/1/79	300x250mm Air Control Damper c/w lockable quadrant	No	1	
4/1/80	Ø150 Butterfly damper c/w lockable quadrant	No	1	
4/1/81	Ø250 Butterfly damper c/w lockable quadrant	No	3	
4/1/82	Ø300 Butterfly damper c/w lockable quadrant	No	3	
4/1/83	400x400mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2	
4/1/84	300x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1	
<u>FIRE CONTROL DAMPERS</u>				
Carried to Trade Summary				
MECHANICAL INSTALLATION				
Bill No. 1				
HVAC INSTALLATION				
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

	<u>Supply, deliver, install and commission EN certified fire dampers of approved make, designed to close automatically upon detection of fire. Dampers shall be fusible link operated and suitable for integration with facility fire alarm and BMS</u>				
4/1/85	350x350mm Motorised Fire Damper	No	1		
4/1/86	Ø150mm Motorised fire damper	No	1		
4/1/87	Ø200mm Motorised fire damper	No	1		
4/1/88	400X400mm Motorised Fire Damper	No	2		
4/1/89	450x450mm Motorised Fire Damper	No	2		
	<u>AIR TERMINALS</u>				
	<u>Diffusers , Grilles and Jet Nozzles</u>				
4/1/90	595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	3		
4/1/91	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	6		
4/1/92	595x595, Ø250 Brian Rickard VAV Diffuser c/w 1.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	1		
4/1/93	595x595, Ø300 Brian Rickard VAV Diffuser c/w 2.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	1		
4/1/94	595x595, Ø350 Brian Rickard VAV Diffuser c/w 2.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	4		
4/1/95	Ø100 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	1		
4/1/96	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No			
	<u>Carried to Trade Summary</u>				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/97	Ø200 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	2			
4/1/98	Ø300 VAV Jet Nozzles c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	11			
4/1/99	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2 x Ø200 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/100	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2 x Ø250 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/101	600x600 standard return air gille type RA with curved blade c/w plenum box over, 2xØ150 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/102	1200x600 standard return air gille type RA with curved blade c/w plenum box over, Ø400 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No				
4/1/103	1195x595 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish. Plenum box with 650x650 ducting	No	6			
4/1/104	1195x595 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish. Plenum box with 2 x 350dia spigots	No				
	<u>Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws,</u>					
4/1/105	450x450mm Door grilles - Powder coated hospital white finish	No	35			
4/1/106	Heat Banks 950x900mm 9kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1					
	HVAC INSTALLATION					
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/107	550x500mm 7.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No				
4/1/108	400x400mm 6kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/109	300x250mm 4kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/110	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	5			
4/1/111	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	2			
4/1/112	Rickard VAV inter-diffuser cabling.	m	250			
4/1/113	MLM Wall mount thermostat temperature controller.	No	45			
<u>WIRE-WAYS</u>						
<u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u>						
4/1/114	25mm Galvanised steel conduit	m	310			
4/1/115	25mm One way entry round conduit box	No	8			
4/1/116	25mm Two way entry round conduit box	No	8			
4/1/117	25mm Three way entry round conduit box	No	8			
4/1/118	25mm Four way entry round conduit box	No	40			
4/1/119	20mm Galvanised steel conduit	m	35			
4/1/120	20mm One way entry round conduit box	No	8			
4/1/121	20mm Two way entry round conduit box	No	8			
4/1/122	20mm Three way entry round conduit box	No	8			
4/1/123	20mm Four way entry round conduit box	No	15			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/124	100x50 Galvanised steel box	No	30			
4/1/125	150x50mm Medium duty cable trays	m	210			
4/1/126	150mm Medium duty galvanised steel cable trunking c/w cover	m	30			
4/1/127	DX TYPE SPLIT UNIT (Inverter Heat Pump Type) Supply, deliver, install and commission inverter type heat pump Midwall split unit, complete with, drain piping, interconnecting refrigerant piping and cabling, fittings, joints, supports, controls etc. as specified 2.6kW Inverter Midwall split unit	No	1			
4/1/128	Condensate PVC piping Ø20mm	m	20			
<u>CHILLED WATER AIR HANDLING UNITS</u>						
<u>AHU - A , Chilled water air-handling unit</u>						
4/1/129	Total cooling - 117 kW <u>Sensible cooling - 115kW</u> <u>Supply air - 6877 l/s</u> <u>Return air- 784 l/s</u> <u>Static pressure - 550 pa</u> <u>Air condition</u> <u>Air-entering - 30°C DB / 19 °C WB</u> <u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u> <u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u> <u>chilled water flow rate - 4,7 l/s</u> <u>Heating</u> <u>Total heating capacity - 10,4kW</u>	No	1			
4/1/130	Sound Attenuators 1100x900mm Split sound attenuator	No	2			
4/1/131	400x350mm Split sound attenuator	No	2			
4/1/132	Canvas Duct Connection Insulated flexible connection between air-handling unit and metal duct including fasteners,	No	4			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

	<u>GROUND FLOOR</u>				
	<u>FANS</u>				
4/1/133	MUB 042 450EC 700x700mm Insulated Box fan 1300l/s @ 250Pa c/w speed controller, 2 of 1m split sound attenuators, discharge cowl with mesh, & mounting brackets, electrical box.	No	4		
	<u>DUCT SYSTEMS</u>				
	<u>RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u>				
	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>				
4/1/134	Category 1 - Insulated Galvanised Sheet Metal Ducting	No	110		
4/1/135	Category 2 - Insulated Galvanised Sheet Metal Ducting	No	35		
4/1/136	Category 3 - Insulated Galvanised Sheet Metal Ducting	No	5		
4/1/137	Category 4 - Insulated Galvanised Sheet Metal Ducting	No	5		
4/1/138	Category 5 - Insulated Galvanised Sheet Metal Ducting	No	5		
	<u>Extra Over Fittings For Rectengular/Square Ducting. Ducting Fittings rate to include insulation</u>				
4/1/139	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	40		
4/1/140	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10		
4/1/141	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	5		
	Carried to Trade Summary				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/142	Category 4 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	5			
4/1/143	Category 5 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	5			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/144	Ø150mm Insulated Spigot	m	12			
4/1/145	Ø200mm Insulated Spigot	m	24			
4/1/146	Ø250mm Insulated Spigot	m	12			
4/1/147	Ø300mm Insulated Spigot	m	5			
4/1/148	Ø350mm Insulated Spigot	m	20			
	<u>Extra Over Fittings For Round Ducting Ducting. Ducting Fittings rate to include insulation.</u>					
4/1/149	Ø100mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/150	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	6			
4/1/151	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	12			
4/1/152	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	6			
4/1/153	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/154	Ø350mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	8			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>				
4/1/155	Ø100mm Insulated flexible duct	m	2		
4/1/156	Ø150mm Insulated flexible duct	m	2		
4/1/157	Ø200mm Insulated flexible duct	m	12		
4/1/158	Ø250mm Insulated flexible duct	m	24		
4/1/159	Ø300mm Insulated flexible duct	m	12		
4/1/160	Ø350mm Insulated flexible duct	m	16		
	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>				
4/1/161	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	No	130		
4/1/162	Category 2 - Un-insulated Galvanised Sheet Metal Ducting	No	5		
4/1/163	Category 3 - Un-insulated Galvanised Sheet Metal Ducting	No	5		
4/1/164	Category 4 - Un-insulated Galvanised Sheet Metal Ducting	No	5		
4/1/165	Category 5 - Un-insulated Galvanised Sheet Metal Ducting	No	5		
	<u>Extra Over Fittings For Rectengular/Square Ducting.</u>				
4/1/166	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	44		
4/1/167	Category 2 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	2		
	Carried to Trade Summary				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/168	Category 3 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	2			
4/1/169	Category 4 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	2			
4/1/170	Category 5 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>					
4/1/171	Ø100mm Un-insulated Spigot	m	2			
4/1/172	Ø150mm Un-insulated Spigot	m	2			
4/1/173	Ø200mm Un-insulated Spigot	m	72			
4/1/174	Ø250mm Un-insulated Spigot	m	2			
4/1/175	Ø300mm Un-insulated Spigot	m	2			
4/1/176	Ø350mm Un-insulated Spigot	m	8			
	<u>Extra Over Fittings For Round Ducting Ducting.</u>					
4/1/177	Ø100mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5			
4/1/178	Ø150mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/179	Ø200mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	82			
4/1/180	Ø250mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/181	Ø300mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	4			
	<u>Carried to Trade Summary</u>					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/182	Ø350mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc. <u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>	No	8			
4/1/183	Ø100mm Un-insulated flexible duct	m	4			
4/1/184	Ø150mm Un-insulated flexible duct	m	4			
4/1/185	Ø200mm Un-insulated flexible duct	m	72			
4/1/186	Ø250mm Un-insulated flexible duct	m	4			
4/1/187	Ø300mm Un-insulated flexible duct	m	4			
4/1/188	Ø350mm Un-insulated flexible duct	m	8			
	<u>AIR TERMINALS</u>					
4/1/189	Diffusion & Grilles 595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	1			
4/1/190	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	3			
4/1/191	595x595, Ø250 Brian Rickard VAV Diffuser c/w 1.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	6			
4/1/192	595x595, Ø300 Brian Rickard VAV Diffuser c/w 2.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	4			
4/1/193	595x595, Ø350 Brian Rickard VAV Diffuser c/w 2.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	1			
4/1/194	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	1			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/195	Ø200 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	18			
4/1/196	600x600 standard return air grille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/197	1200x600 standard return air grille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	3			
4/1/198	300x300 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1			
4/1/199	400x400 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1			
4/1/200	500x500 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1			
4/1/201	Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws. 450x450mm Door grilles - Powder coated hospital white finish	No	18			
<u>AIR CONTROL DAMPERS</u>						
4/1/202	Ø150 Butterfly damper c/w lockable quadrant	No	1			
4/1/203	Ø200 Butterfly damper c/w lockable quadrant	No	1			
4/1/204	Ø250 Butterfly damper c/w lockable quadrant	No	1			
4/1/205	Ø300 Butterfly damper c/w lockable quadrant	No	2			
4/1/206	Ø350 Butterfly damper c/w lockable quadrant	No	6			
4/1/207	Ø400 Butterfly damper c/w lockable quadrant	No	1			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/208	650x600mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/209	400x400mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/210	250x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/211	FIRE CONTROL DAMPERS Ø150mm Motorised fire damper	No	2			
4/1/212	150 x 200mm Motorised fire damper	No	1			
4/1/213	500 x 400mm Motorised fire damper	No	2			
4/1/214	Heater Banks 800x800mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/215	700x700mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/216	600x600mm 7.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/217	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	1			
4/1/218	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	1			
4/1/219	Rickard VAV inter-diffuser cabling.	No	130			
4/1/220	MLM Wall mount thermostat temperature controller.	No	12			
<u>WIRE-WAYS</u>						
<u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u>						
4/1/221	25mm Galvanised steel conduit	m	150			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1						
HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/222	25mm One way entry round conduit box	No	2			
4/1/223	25mm Two way entry round conduit box	No	2			
4/1/224	25mm Three way entry round conduit box	No	2			
4/1/225	25mm Four way entry round conduit box	No	15			
4/1/226	20mm Galvanised steel conduit	m	40			
4/1/227	20mm One way entry round conduit box	No	2			
4/1/228	20mm Two way entry round conduit box	No	2			
4/1/229	20mm Three way entry round conduit box	No	2			
4/1/230	20mm Four way entry round conduit box	No	2			
4/1/231	100x50 Galvanised steel box	No	12			
4/1/232	150x50mm Medium duty cable trays	m	90			
4/1/233	150mm Medium duty galvanised steel cable trunking c/w cover	m	20			
<u>GROUND FLOOR</u>						
<u>FANS</u>						
4/1/234	Ø315mm Axial flow fan, duty @ 250Pa , 464L/s air flow, complete with a speed controller, 2-off matching sound attenuators, electrical box, timer controller.	No	1			
4/1/235	915x973x660mm Insulated box fan, duty @ 220Pa , 1469L/s air flow, complete with a speed controller, 2-off 1m split sound attenuators, discharge cowl with mesh & mounting brackets, electrical box, timer controller.	No	1			
<u>DUCT SYSTEMS</u>						
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

	<u>RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u> <u>Rectangular galvanised sheet metal low pressure ducting and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>				
4/1/236	ø315 Flexible connection between fan sound attenuator and ducting including fasteners.	No	2		
4/1/237	Flexible connection between fan sound attenuator and ducting including fasteners.	No	2		
4/1/238	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	m ²	117		
	<u>Extra Over Fittings For Rectengular/Square Ducting.</u>				
4/1/239	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	27		
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>				
4/1/240	Ø150mm Un-insulated Spigot	m	9		
4/1/241	Ø200mm Un-insulated Spigot	m	18		
	<u>Extra Over Fittings For Round Ducting Ducting.</u>				
4/1/242	Ø150mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5		
4/1/243	Ø200mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5		
	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>				
4/1/244	Ø150mm Un-insulated flexible duct	m	18		
	Carried to Trade Summary			R	
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/245	Ø200mm Un-insulated flexible duct <u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>	m	16			
4/1/246	Category 1 - Insulated Galvanised Sheet Metal Ducting	m ²	285			
4/1/247	Category 2 - Insulated Galvanised Sheet Metal Ducting	m ²	51			
4/1/248	Category 3 - Insulated Galvanised Sheet Metal Ducting	m ²	330			
	<u>Extra Over Fittings For Rectengular/Square Ducting. Ducting Fittings rate to include insulation</u>					
4/1/249	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	30			
4/1/250	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	3			
4/1/251	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	22			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/252	Ø150mm Insulated Spigot	m	12			
4/1/253	Ø200mm Insulated Spigot	m	20			
4/1/254	Ø250mm Insulated Spigot	m	12			
4/1/255	Ø300mm Insulated Spigot	m	16			
4/1/256	Ø350mm Insulated Spigot	m	12			
4/1/257	Ø500mm Insulated Spigot	m	5			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Extra Over Fittings For Round Ducting Ducting.</u> <u>Ducting Fittings rate to include insulation.</u>				
4/1/258	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5		
4/1/259	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2		
4/1/260	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5		
4/1/261	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	9		
4/1/262	Ø350mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	6		
4/1/263	Ø500mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	4		
4/1/264	Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms. Ø150mm Insulated flexible duct	m	12		
4/1/265	Ø200mm Insulated flexible duct	m	10		
4/1/266	Ø250mm Insulated flexible duct	m	15		
4/1/267	Ø300mm Insulated flexible duct	m	16		
4/1/268	Ø350mm Insulated flexible duct	m	12		
4/1/269	Ø500mm Insulated flexible duct	m	4		
	<u>AIR CONTROL DAMPERS</u>				
4/1/270	Ø150 Butterfly damper c/w lockable quadrant	No	6		
4/1/271	Ø200 Butterfly damper c/w lockable quadrant	No	2		
4/1/272	Ø250 Butterfly damper c/w lockable quadrant	No	10		
4/1/273	Ø300 Butterfly damper c/w lockable quadrant	No	10		
	Carried to Trade Summary				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/274	Ø350 Butterfly damper c/w lockable quadrant	No	8			
4/1/275	Ø500 Butterfly damper c/w lockable quadrant	No	1			
4/1/276	400x300mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2			
4/1/277	450x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/278	400x350mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/279	300x350mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	3			
4/1/280	400x400mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/281	750x750mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/282	1100x900mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
<u>FIRE DAMPERS</u>						
<u>Supply, deliver, install and commission EN certified fire dampers of approved make, designed to close automatically upon detection of fire. Dampers shall be fusible link operated and suitable for intergration with facility fire alarm and BMS</u>						
4/1/283	1100x900mm Motorized Fire Dampers	No	1			
4/1/284	1000x850mm Motorized Fire Dampers	No	1			
<u>AIR TERMINALS</u>						
<u>Diffusers , Grilles and Jet Nozzles</u>						
4/1/285	595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	7			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/286	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	1			
4/1/287	595x595, Ø250 Brian Rickard VAV Diffuser c/w 1.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	10			
4/1/288	595x595, Ø300 Brian Rickard VAV Diffuser c/w 2.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	9			
4/1/289	595x595, Ø350 Brian Rickard VAV Diffuser c/w 2.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	8			
4/1/290	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	8			
4/1/291	Ø200 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	6			
4/1/292	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2xØ200 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/293	600x600 standard return air gille type RA with curved blade c/w plenum box over, Ø300 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	2			
4/1/294	1200x600 standard return air gille type RA with curved blade c/w plenum box over, Ø500 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	2			
4/1/295	600x600 standard return air gille type RA with curved blade c/w plenum box over, Ø200 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/296	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2xØ250 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
Carried to Trade Summary						
<p>MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Weather Louvres</u>					
4/1/297	500 x 450 Weather louvre c/w plenum box & W.M.S	No	1			
4/1/298	900 x 800 Weather louvre c/w plenum box & W.M.S	No	1			
	<u>Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws.</u>					
4/1/299	450x450mm Door grilles - Powder coated hospital white finish	No	10			
	<u>Heater Banks</u>					
4/1/300	400x300mm 6kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	3			
4/1/301	450x250mm 6kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/302	275x200mm 4.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/303	400x400mm 5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/304	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	5			
4/1/305	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	2			
4/1/306	Rickard VAV inter-diffuser cabling.	No	350			
4/1/307	MLM Wall mount thermostat temperature controller.	No	45			
	<u>WIRE-WAYS</u>					
	<u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u>					
4/1/308	25mm Galvanised steel conduit	m	310			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					R

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/309	25mm One way entry round conduit box	No	10			
4/1/310	25mm Two way entry round conduit box	No	10			
4/1/311	25mm Three way entry round conduit box	No	10			
4/1/312	25mm Four way entry round conduit box	No	40			
4/1/313	20mm Galvanised steel conduit	m	36			
4/1/314	20mm One way entry round conduit box	No	10			
4/1/315	20mm Two way entry round conduit box	No	10			
4/1/316	20mm Three way entry round conduit box	No	10			
4/1/317	20mm Four way entry round conduit box	No	15			
4/1/318	100x50 Galvanised steel box	No	32			
4/1/319	150x50mm Medium duty cable trays	m	200			
4/1/320	150mm Medium duty galvanised steel cable trunking c/w cover	m	20			
<u>CHILLED WATER AIR HANDLING UNITS</u>						
4/1/321	AHU - B , Chilled water air-handling unit	No	1			
<u>Total cooling -98 kW</u>						
<u>Sensible cooling - 98 kW</u>						
<u>Supply air - 6385 l/s</u>						
<u>Return air- 4203 l/s</u>						
<u>Static pressure - 550 pa</u>						
<u>Air condition</u>						
<u>Air-entering - 30°C DB / 19 °C WB</u>						
<u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u>						
<u>Chilled water</u>						
<u>chilled water-entering - 6°C</u>						
<u>chilled water-leaving coil - 12 °C</u>						
<u>chilled water flow rate - 3.9 l/s</u>						
4/1/322	Sound Attenuators 1100x900mm Split sound attenuator	No	2			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/323	750x750mm Split sound attenuator	No	2			
4/1/324	Canvas Duct Connection Insulated flexible connection between air-handling unit and metal duct including fasteners,	No	4			
<u>FIRST FLOOR</u>						
<u>FANS</u>						
4/1/325	915x973x660mm Insulated box fan, duty @ 250Pa , 1417L/s air flow, complete with a speed controller, 2-off 1m split sound attenuators, discharge cowl with mesh, mounting brackets electrical box, timer controller, filter medium	No	1			
4/1/326	915x973x660mm Insulated box fan, duty @ 250Pa , 1240L/s air flow, complete with a speed controller, 2-off 1m split sound attenuators, discharge cowl with mesh, mounting brackets electrical box, timer controller, filter medium	No	1			
4/1/327	710x768x610mm Insulated box fan, duty @ 250Pa , 1032L/s air flow, complete with a speed controller, 2-off 1m split sound attenuators, discharge cowl with mesh, mounting brackets electrical box, timer controller.	No	1			
<u>DUCT SYSTEMS</u>						
<u>RECTENGLAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u>						
<u>Rectangular galvanised sheet metal low pressure ducting and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>						
4/1/328	Flexible connection between fan sound attenuator and ducting including fasteners.	No	3			
4/1/329	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	m ²	313			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

	<u>Extra Over Fittings For Rectengular/Square Ducting.</u>					
4/1/330	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	30			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>					
4/1/331	Ø100mm Un-insulated Spigot	m	14			
4/1/332	Ø150mm Un-insulated Spigot	m	100			
4/1/333	Ø200mm Un-insulated Spigot	m	14			
4/1/334	Ø250mm Un-insulated Spigot	m	2			
4/1/335	Ø300mm Un-insulated Spigot	m	5			
	<u>Extra Over Fittings For Round Ducting Ducting.</u>					
4/1/336	Ø100mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	10			
4/1/337	Ø150mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	30			
4/1/338	Ø200mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	10			
4/1/339	Ø250mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/340	Ø300mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	10			
	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>					
4/1/341	Ø100mm Un-insulated flexible duct	m	14			
4/1/342	Ø150mm Un-insulated flexible duct	m	44			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/343	Ø200mm Un-insulated flexible duct	m	6			
4/1/344	Ø250mm Un-insulated flexible duct	m	6			
4/1/345	Ø300mm Un-insulated flexible duct	m	8			
	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/346	Category 1 - Insulated Galvanised Sheet Metal Ducting	m ²	126			
	<u>Extra Over Fittings For Rectengular/Square Ducting. Ducting Fittings rate to include insulation</u>					
4/1/347	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	20			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/348	Ø200mm Insulated Spigot	m	14			
4/1/349	Ø250mm Insulated Spigot	m	18			
4/1/350	Ø300mm Insulated Spigot	m	15			
	<u>Extra Over Fittings For Round Ducting Ducting. Ducting Fittings rate to include insulation.</u>					
4/1/351	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	9			
4/1/352	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	12			
4/1/353	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	7			
	Carried to Trade Summary					
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R		

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>				
4/1/354	Ø200mm Insulated flexible duct	m	12		
4/1/355	Ø250mm Insulated flexible duct	m	16		
4/1/356	Ø300mm Insulated flexible duct	m	12		
<u>AIR CONTROL DAMPERS</u>					
4/1/357	Ø150 Butterfly damper c/w lockable quadrant	No	18		
4/1/358	Ø200 Butterfly damper c/w lockable quadrant	No	6		
4/1/359	Ø250 Butterfly damper c/w lockable quadrant	No	6		
4/1/360	Ø300 Butterfly damper c/w lockable quadrant	No	4		
<u>AIR TERMINALS</u>					
<u>Diffusers , Grilles and Jet Nozzles</u>					
4/1/361	595x595, Ø200 Brian Rickard CAV Diffuser - Powder coated hospital white finish	No	6		
4/1/362	595x595, Ø250 Brian Rickard CAV Diffuser - Powder coated hospital white finish	No	8		
4/1/363	595x595, Ø300 Brian Rickard CAV Diffuser - Powder coated hospital white finish	No	6		
4/1/364	Ø100 Metal Supply Air Disc Valves - Powder coated hospital white finish	No	7		
4/1/365	Ø150 Metal Supply Air Disc Valves - Powder coated hospital white finish	No	18		
4/1/366	Ø150 Extract Air Disc Valves - Powder coated hospital white finish	No	5		
4/1/367	Ø200 Extract Air Disc Valves - Powder coated hospital white finish	No	2		
<u>Carried to Trade Summary</u>					
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/368	Ø250 Extract Air Disc Valves - Powder coated hospital white finish	No	2			
4/1/369	Ø300 Supply Air Disc Valves - Powder coated hospital white finish	No	1			
4/1/370	1200x600 standard return air gille type RA with curved blade c/w plenum box over, Ø300 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	3			
4/1/371	Weather louvres 750 x 750 Weather louvre c/w plenum box & W.M.S	No	2			
4/1/372	750 x 700 Weather louvre c/w plenum box & W.M.S	No	1			
4/1/373	Filter box unit FCU Filter box - 1200 x 400 Filter box c/w 50mm pleated filters and side access.	No	3			
	<u>Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws.</u>					
4/1/374	DG.1 : 450 x 450 :	No	14			
4/1/375	HEAT RECOVERY SYSTEM Supply, installation, testing and commissioning of complete VRV heat recovery system including outdoor condensing units, indoor units, refrigerant piping with insulation, refrigerant joint kits, branch selector BS boxes for HR, control cabling, supports, vibration isolators, and all necessary accessories as per manufacturers recommendations. Outdoor units VRF1 - 110W VRV Heat recovery condenser unit	No	1			
4/1/376	Indoor units AC-01 - 1 kW VRV HR One-Way-Blow-Cassette	No	1			
4/1/377	AC-02 - 1.8kW VRV HR One-Way-Blow-Cassette	No	2			
4/1/378	AC-03 - 2.2 kW VRV HR Midwall Unit	No	1			
4/1/379	AC-04 - 2.3kW VRV HR One-Way-Blow- Cassette	No	1			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/380	AC-05 - 2.6kW VRV HR Midwall unit	No	5			
4/1/381	AC-06 - 2.7kW VRV HR Midwall Unit	No	1			
4/1/382	AC-07 - 3.2kW VRV HR Midwall Unit	No	1			
4/1/383	AC-08 - 3.5kW VRV HR One-Way-Blow- Cassette	No	1			
4/1/384	AC-09 - 4.9kW VRV HR Midwall unit	No	1			
4/1/385	AC-10 - 4.9kW VRV HR Ceiling Cassette	No	2			
4/1/386	AC-11 - 5.9kW VRV HR Ceiling Cassette	No	1			
4/1/387	AC-12 - 3.5kW VRV HR Ceiling Cassette	No	1			
4/1/388	AC-13 - 5kW VRV HR Ceiling Cassette	No	3			
4/1/389	HA-01 - 10.5kW VRV HR Ducted Hideaway	No	1			
4/1/390	HA-02 - 14kW VRV HR Ducted Hideaway	No	1			
4/1/391	HA-03 - 15kW VRV HR Ducted Hideaway	No	1			
<u>Controls</u>						
4/1/392	Remote controls (Infrared)	No	9			
4/1/393	Remote controls (Hardwired)	No	16			
4/1/394	Refrigerant piping - complete with supports Class type as per manufacturer's recommendation Liquid pipe ø6.35mm	m	400			
4/1/395	Gas pipe ø12.7mm	m	400			
4/1/396	Liquid pipe ø9.52mm	m	300			
4/1/397	Gas pipe ø15.9mm	m	300			
4/1/398	Liquid pipe ø15.9mm	m	350			
4/1/399	Gas pipe ø28.6mm	m	350			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/400	Refrigerant pipe insulation - (Armaflex) Liquid pipe ø6.35mm	m	400			
4/1/401	Gas pipe ø12.7mm	m	400			
4/1/402	Liquid pipe ø9.52mm	m	300			
4/1/403	Gas pipe ø15.9mm	m	300			
4/1/404	Liquid pipe ø15.9mm	m	350			
4/1/405	Gas pipe ø28.6mm	m	350			
4/1/406	Condensate PVC piping ø20mm	m	480			
<u>SECOND FLOOR</u>						
<u>FANS</u>						
4/1/407	ø315 mm lin-linel flow fan, duty @ 150Pa , 315L/s air flow, complete with a speed controller, 2-off matching sound attenuators, electrical box, time controller.	No	1			
4/1/408	ø350 mm In-line tube fan, duty @ 150Pa , 370L/s air flow, complete with a speed controller, 2-off matching sound attenuators, electrical box, timer controller, filter medium.	No	1			
<u>DUCT SYSTEMS</u>						
<u>RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u>						
<u>Rectangular galvanised sheet metal low pressure ducting and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>						
4/1/409	Flexible connection between fan sound attenuator and ducting including fasteners.	No	4			
4/1/410	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	m ²	38			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1						
HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						
R						

4/1/411	<u>Extra Over Fittings For Rectengular/Square Ducting.</u> Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	8		
4/1/412	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>	No	16		
4/1/413	Ø150mm Un-insulated Spigot	No	7		
4/1/414	<u>Extra Over Fittings For Round Ducting Ducting.</u> Ø150mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	8		
4/1/415	Ø350mm Un-insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2		
4/1/416	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>	m	16		
4/1/417	Ø150mm Un-insulated flexible duct	m	4		
4/1/418	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>	m ²	315		
4/1/419	Category 1 - Insulated Galvanised Sheet Metal Ducting	m ²	130		
4/1/420	Category 2 - Insulated Galvanised Sheet Metal Ducting	m ²	135		
	Carried to Trade Summary MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

	<u>Extra Over Fittings For Rectengular/Square Ducting.</u> <u>Ducting Fittings rate to include insulation</u>					
4/1/421	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	35			
4/1/422	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	9			
4/1/423	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/424	Ø150mm Insulated Spigot	m	33			
4/1/425	Ø200mm Insulated Spigot	m	96			
	<u>Extra Over Fittings For Round Ducting Ducting.</u> <u>Ducting Fittings rate to include insulation.</u>					
4/1/426	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	14			
4/1/427	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	60			
	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>					
4/1/428	Ø150mm Insulated flexible duct	m	14			
4/1/429	Ø200mm Insulated flexible duct	m	94			
	<u>AIR CONTROL DAMPERS</u>					
4/1/430	Ø150 Butterfly damper c/w lockable quadrant	No	4			
4/1/431	Ø200 Butterfly damper c/w lockable quadrant	No	44			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/432	850x800mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/433	650x650mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/434	650x400mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/435	550x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/436	400x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
<u>FIRE DAMPERS</u>						
<u>Supply, deliver, install and commission EN certified fire dampers of approved make, designed to close automatically upon detection of fire. Dampers shall be fusible link operated and suitable for intergration with facility fire alarm and BMS</u>						
4/1/437	850 x 800mm Motorised fire damper	No	1			
4/1/438	650 x 650mm Motorised fire damper	No	2			
4/1/439	400 x 250mm Motorised fire damper	No	1			
<u>AIR TERMINALS</u>						
<u>Diffusers , Grilles and Jet Nozzles</u>						
4/1/440	595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	3			
4/1/441	595x595, Ø175 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	4			
4/1/442	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	47			
<u>Carried to Trade Summary</u>						
<p>MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/443	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	8			
4/1/444	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2xØ350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1			
4/1/445	1200x600 standard return air gille type RA with curved blade c/w plenum box over, 2xØ400 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	2			
<u>Weather Louvres</u>						
4/1/446	WL-01 - 500 x 450 Weather louvre c/w plenum box & W.M.S	No	1			
4/1/447	WL-02 - 400 x 350 Weather louvre c/w plenum box & W.M.S	No	1			
<u>Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws.</u>						
4/1/448	450x450mm Door grilles - Powder coated hospital white finish	No	10			
<u>Heater Banks</u>						
4/1/449	850x800mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/450	650x650mm 7.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/451	350x200mm 4.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/452	200x250mm 2kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
<u>Carried to Trade Summary</u>						
<p>MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/453	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	5			
4/1/454	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	2			
4/1/455	Rickard VAV inter-diffuser cabling.	No	350			
4/1/456	MLM Wall mount thermostat temperature controller.	No	45			
<u>WIRE-WAYS</u>						
<u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u>						
4/1/457	25mm Galvanised steel conduit	m	485			
4/1/458	25mm One way entry round conduit box	No	10			
4/1/459	25mm Two way entry round conduit box	No	10			
4/1/460	25mm Three way entry round conduit box	No	10			
4/1/461	25mm Four way entry round conduit box	No	60			
4/1/462	20mm Galvanised steel conduit	m	50			
4/1/463	20mm One way entry round conduit box	No	10			
4/1/464	20mm Two way entry round conduit box	No	10			
4/1/465	20mm Three way entry round conduit box	No	10			
4/1/466	20mm Four way entry round conduit box	No	20			
4/1/467	100x50 Galvanised steel box	No	45			
4/1/468	150x50mm Medium duty cable trays	m	300			
4/1/469	150mm Medium duty galvanised steel cable trunking c/w cover	m	50			
<u>CHILLED WATER AIR HANDLING UNITS</u>						
4/1/470	AHU1 - B2 , Chilled water air-handling unit	No	1			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

	<p><u>Total cooling - 22 kW</u> <u>Sensible cooling - 28 kW</u> <u>Supply air - 2550 l/s</u> <u>Return air- 390 l/s</u> <u>Static pressure - 550 pa</u> <u>Air condition</u> <u>Air-entering - 30°C DB / 19 °C WB</u> <u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u> <u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u> <u>chilled water flow rate - 0.9 l/s</u> <u>Heating</u> <u>Total heating capacity - 11,1kW</u></p>			
4/1/471	AHU2 - B2 , Chilled water air-handling unit	No	1	
	<p><u>Total cooling - 40 kW</u> <u>Sensible cooling - 40 kW</u> <u>Supply air - 3900 l/s</u> <u>Return air- 2059 l/s</u> <u>Static pressure - 550 pa</u> <u>Air condition</u> <u>Air-entering - 30°C DB / 19 °C WB</u> <u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u> <u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u> <u>chilled water flow rate - 1.6 l/s</u> <u>Heating</u> <u>Total heating capacity - 22,4kW</u></p>			
4/1/472	HA1 - B2 , Chilled water Fan Coil Unit	No	1	
	<p><u>Chilled water ducted fan coil unit c/w 5kw total cooling</u> <u>capacity, 480l/s air flow, discharge and return air plenum</u> <u>c/w grilles, and wall mounted controls.</u> <u>chilled water flow rate - 0.2 l/s</u></p>			
4/1/473	Sound Attenuators 850x850mm Split sound attenuator	No	1	
4/1/474	650x650mm Split sound attenuator	No	2	
4/1/475	400x250mm Split sound attenuator	No	1	
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/476	Canvas Duct Connection Insulated flexible connection between air-handling unit and metal duct including fasteners,	No	4		
	<u>GROUND FLOOR</u>				
4/1/477	FANS MUB 042 450EC 700x700mm Insulated Box fan 1600l/s @ 250Pa c/w speed controller, 2 of 1m split sound attenuators, discharge cowl with mesh, & mounting brackets, electrical box.	No	6		
	<u>CHILLED WATER AIR HANDLING UNITS</u>				
4/1/478	AHU - C01 Chilled water air-handling unit <u>Total cooling - 101 kW</u> <u>Sensible cooling - 101 kW</u> <u>Supply air - 5792 l/s</u> <u>Return air- 2790 l/s</u> <u>Static pressure - 550 pa</u> <u>Air condition</u> <u>Air-entering - 30°C DB / 19 °C WB</u> <u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u> <u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u> <u>chilled water flow rate - 4.0L/s</u> <u>Heating</u> <u>Total heating capacity - 50kW</u> <u>Ambiant condition</u> <u>Ambiant - 35°C</u>	No	1		
4/1/479	AHU - C02 Chilled water air-handling unit	No	1		
	Carried to Trade Summary MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			R	

	<p><u>Total cooling - 101 kW</u> <u>Sensible cooling - 101 kW</u> <u>Supply air - 5792 l/s</u> <u>Return air- 2790 l/s</u> <u>Static pressure - 550 pa</u> <u>Air condition</u> <u>Air-entering - 30°C DB / 19 °C WB</u> <u>Air-leaving coil - 11.1 °C DB / 10.6 °C WB</u> <u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u> <u>chilled water flow rate - 4.0L/s</u> <u>Heating</u> <u>Total heating capacity - 50kW</u> <u>Ambiant condition</u> <u>Ambiant - 35°C</u></p>			
4/1/480	Sound Attenuators 2450x800mm Split sound attenuator	No	2	
4/1/481	1200x800mm Split sound attenuator	No	3	
4/1/482	Canvas Duct Connection Insulated flexible connection between air-handling unit and metal duct including fasteners, 1500 x 1500 mm	No	4	
<u>DUCT SYSTEMS</u>				
<p><u>RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.</u></p> <p><u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u></p>				
4/1/483	Category 1 - Insulated Galvanised Sheet Metal Ducting	No	340	
4/1/484	Category 2 - Insulated Galvanised Sheet Metal Ducting	No	50	
4/1/485	Category 3 - Insulated Galvanised Sheet Metal Ducting	No	290	
4/1/486	Category 4 - Insulated Galvanised Sheet Metal Ducting	No	15	
<u>Carried to Trade Summary</u>				
<p>MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/487	Category 5 - Insulated Galvanised Sheet Metal Ducting <u>Extra Over Fittings For Rectengular/Square Ducting. Ducting Fittings rate to include insulation</u>	No	80			
4/1/488	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	215			
4/1/489	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/490	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	151			
4/1/491	Category 4 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/492	Category 5 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/493	Ø100mm Insulated Spigot	m	5			
4/1/494	Ø150mm Insulated Spigot	m	48			
4/1/495	Ø200mm Insulated Spigot	m	48			
4/1/496	Ø250mm Insulated Spigot	m	44			
4/1/497	Ø300mm Insulated Spigot	m	48			
4/1/498	Ø350mm Insulated Spigot	m	64			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Extra Over Fittings For Round Ducting Ducting.</u> <u>Ducting Fittings rate to include insulation.</u>				
4/1/499	Ø100mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5		
4/1/500	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	24		
4/1/501	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	24		
4/1/502	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	22		
4/1/503	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	24		
4/1/504	Ø350mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	64		
	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>				
4/1/505	Ø100mm Insulated flexible duct	m	5		
4/1/506	Ø150mm Insulated flexible duct	m	48		
4/1/507	Ø200mm Insulated flexible duct	m	48		
4/1/508	Ø250mm Insulated flexible duct	m	44		
4/1/509	Ø300mm Insulated flexible duct	m	48		
4/1/510	Ø350mm Insulated flexible duct	m	88		
	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>				
4/1/511	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	No	280		
	Carried to Trade Summary				
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/512	Category 2 - Un-insulated Galvanised Sheet Metal Ducting	No	80			
4/1/513	Category 3 - Un-insulated Galvanised Sheet Metal Ducting	No	45			
4/1/514	Category 4 - Un-insulated Galvanised Sheet Metal Ducting	No	10			
4/1/515	Category 5 - Un-insulated Galvanised Sheet Metal Ducting	No	10			
<u>Extra Over Fittings For Rectengular/Square Ducting.</u>						
4/1/516	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	130			
4/1/517	Category 2 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	75			
4/1/518	Category 3 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	90			
4/1/519	Category 4 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/520	Category 5 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>						
4/1/521	Ø100mm Un-insulated Spigot	m	5			
4/1/522	Ø150mm Un-insulated Spigot	m	5			
4/1/523	Ø200mm Un-insulated Spigot	m	108			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/524	Ø250mm Un-insulated Spigot	m	12			
4/1/525	Ø300mm Un-insulated Spigot	m	52			
4/1/526	Ø350mm Un-insulated Spigot	m	64			
<u>Extra Over Fittings For Round Ducting Ducting.</u>						
4/1/527	Ø100mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	5			
4/1/528	Ø150mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	5			
4/1/529	Ø200mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	22			
4/1/530	Ø250mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	5			
4/1/531	Ø300mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	6			
4/1/532	Ø350mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	10			
<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>						
4/1/533	Ø100mm Un-insulated flexible duct	m	4			
4/1/534	Ø150mm Un-insulated flexible duct	m	4			
4/1/535	Ø200mm Un-insulated flexible duct	m	44			
4/1/536	Ø250mm Un-insulated flexible duct	m	4			
4/1/537	Ø300mm Un-insulated flexible duct	m	12			
4/1/538	Ø350mm Un-insulated flexible duct	m	20			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

<u>AIR TERMINALS</u>					
4/1/539	Diffusion & Grilles 595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	12		
4/1/540	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	12		
4/1/541	595x595, Ø250 Brian Rickard VAV Diffuser c/w 1.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	11		
4/1/542	595x595, Ø300 Brian Rickard VAV Diffuser c/w 2.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	12		
4/1/543	595x595, Ø350 Brian Rickard VAV Diffuser c/w 2.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	10		
4/1/544	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	1		
4/1/545	Ø200 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	27		
4/1/546	600x600 standard return air gille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1		
4/1/547	1200x600 standard return air gille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	13		
4/1/548	300x300 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1		
4/1/549	400x400 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1		
Carried to Trade Summary					
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/550	500x500 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	18			
4/1/551	Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws. 450x450mm Door grilles - Powder coated hospital white finish	No	40			
4/1/552	Weather Louvres 800x800mm Weather louvre c/w plenum box & W.M.S	No	6			
4/1/553	Air Control Dampers Ø150 Butterfly damper c/w lockable quadrant	No	2			
4/1/554	Ø200 Butterfly damper c/w lockable quadrant	No	2			
4/1/555	Ø250 Butterfly damper c/w lockable quadrant	No	2			
4/1/556	Ø300 Butterfly damper c/w lockable quadrant	No	18			
4/1/557	Ø350 Butterfly damper c/w lockable quadrant	No	4			
4/1/558	Ø400 Butterfly damper c/w lockable quadrant	No	24			
4/1/559	1200x800mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2			
4/1/560	1000x700mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2			
4/1/561	600x600mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/562	550x500mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/563	350x350mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/564	Fire Dampers Ø150mm Motorised fire damper	No	4			
4/1/565	Ø200mm Motorised fire damper	No	4			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/566	150 x 250mm Motorised fire damper	No	1			
4/1/567	350 x 350mm Motorised fire damper	No	1			
4/1/568	450 x400mm Motorised fire damper	No	1			
4/1/569	550 x 550mm Motorised fire damper	No	2			
4/1/570	650 x 600mm Motorised fire damper	No	2			
4/1/571	9500 x 800mm Motorised fire damper	No	1			
4/1/572	1200 x 800mm Motorised fire damper	No	2			
4/1/573	2450 x 800mm Motorised fire damper	No	2			
4/1/574	Heater Banks 1200x800mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	2			
4/1/575	1000x700mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	2			
4/1/576	600x600mm 7.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/577	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	5			
4/1/578	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	2			
4/1/579	Rickard VAV inter-diffuser cabling.	No	350			
4/1/580	MLM Wall mount thermostat temperature controller.	No	45			
4/1/581	<u>WIRE-WAYS</u> <u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u> 25mm Galvanised steel conduit	m	485			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/582	25mm One way entry round conduit box	No	10			
4/1/583	25mm Two way entry round conduit box	No	10			
4/1/584	25mm Three way entry round conduit box	No	10			
4/1/585	25mm Four way entry round conduit box	No	60			
4/1/586	20mm Galvanised steel conduit	m	50			
4/1/587	20mm One way entry round conduit box	No	10			
4/1/588	20mm Two way entry round conduit box	No	10			
4/1/589	20mm Three way entry round conduit box	No	10			
4/1/590	20mm Four way entry round conduit box	No	20			
4/1/591	100x50 Galvanised steel box	No	45			
4/1/592	150x50mm Medium duty cable trays	m	300			
4/1/593	150mm Medium duty galvanised steel cable trunking c/w cover	m	50			
<u>GROUND FLOOR</u>						
<u>FANS</u>						
4/1/594	MUB 042 450EC 700x700mm Insulated Box fan 1300l/s @ 250Pa c/w speed controller, 2 of 1m split sound attenuators, discharge cowl with mesh, & mounting brackets, electrical box.	No	4			
<u>CHILLED WATER AIR HANDLING UNITS</u>						
4/1/595	AHU - D01 Chilled Water air-handling unit	No	1			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

	<p>Total cooling - 196 kW Sensible cooling - 196 kW Supply air - 11302 l/s Return air- 5613 l/s Static pressure - 550 pa Air condition Air-entering - 30°C DB / 16 °C WB Air-leaving coil - 10.4 °C DB / 8.4 °C WB Chilled water chilled water-entering - 6°C chilled water-leaving coil - 12 °C chilled water flow rate - 7.81l/s Heating Total heating capacity - 138kW Ambiant condition Ambiant - 35°C</p>			
4/1/596	Sound Attenuators 1900x900mm Split sound attenuator	No	1	
4/1/597	1300x800mm Split sound attenuator	No	2	
4/1/598	Canvas Duct Connection Insulated flexible connection between air-handling unit and metal duct including fasteners, 1500 x 1500 mm	No	2	
	DUCT SYSTEMS			
	RECTENGULAR/SQAURE DUCTING BELOW TRUSSES OR CONCRETE SOFFITS INCLUDING SUPPORT MECHANISMS.			
	Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. Ducting rate to include insulation			
4/1/599	Category 1 - Insulated Galvanised Sheet Metal Ducting	No	160	
4/1/600	Category 2 - Insulated Galvanised Sheet Metal Ducting	No	60	
4/1/601	Category 3 - Insulated Galvanised Sheet Metal Ducting	No	410	
4/1/602	Category 4 - Insulated Galvanised Sheet Metal Ducting	No	204	
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/603	Category 5 - Insulated Galvanised Sheet Metal Ducting <u>Extra Over Fittings For Rectengular/Square Ducting. Ducting Fittings rate to include insulation</u>	No	10			
4/1/604	Category 1 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/605	Category 2 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/606	Category 3 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	100			
4/1/607	Category 4 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	30			
4/1/608	Category 5 - Insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	5			
	<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification. Ducting rate to include insulation</u>					
4/1/609	Ø100mm Insulated Spigot	m	5			
4/1/610	Ø150mm Insulated Spigot	m	4			
4/1/611	Ø200mm Insulated Spigot	m	112			
4/1/612	Ø250mm Insulated Spigot	m	64			
4/1/613	Ø300mm Insulated Spigot	m	4			
4/1/614	Ø350mm Insulated Spigot	m	18			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Extra Over Fittings For Round Ducting Ducting.</u> <u>Ducting Fittings rate to include insulation.</u>					
4/1/615	Ø100mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	5			
4/1/616	Ø150mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/617	Ø200mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	56			
4/1/618	Ø250mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	32			
4/1/619	Ø300mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	2			
4/1/620	Ø350mm Insulated Duct Fittings - 90°bends, 45° bends, 15° bends etc.	No	10			
	<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>					
4/1/621	Ø100mm Insulated flexible duct	m	5			
4/1/622	Ø150mm Insulated flexible duct	m	4			
4/1/623	Ø200mm Insulated flexible duct	m	112			
4/1/624	Ø250mm Insulated flexible duct	m	64			
4/1/625	Ø300mm Insulated flexible duct	m	52			
4/1/626	Ø350mm Insulated flexible duct	m	18			
	<u>Rectangular galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification.</u>					
4/1/627	Category 1 - Un-insulated Galvanised Sheet Metal Ducting	No	150			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/628	Category 2 - Un-insulated Galvanised Sheet Metal Ducting	No	75			
4/1/629	Category 3 - Un-insulated Galvanised Sheet Metal Ducting	No	28			
4/1/630	Category 4 - Un-insulated Galvanised Sheet Metal Ducting	No	10			
4/1/631	Category 5 - Un-insulated Galvanised Sheet Metal Ducting	No	10			
<u>Extra Over Fittings For Rectengular/Square Ducting.</u>						
4/1/632	Category 1 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	150			
4/1/633	Category 2 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	120			
4/1/634	Category 3 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	20			
4/1/635	Category 4 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
4/1/636	Category 5 - Un-insulated Duct Fittings - Radius bends, Square bends, 45°bends, 15° bends, 90° bends, transformations, tees or branches.	No	10			
<u>Round galvanised sheet metal duct and duct accessories complete, including hanger rods, fixing bolts, necessary fixing material, etc, as per specification.</u>						
4/1/637	Ø100mm Un-insulated Spigot	m	5			
4/1/638	Ø150mm Un-insulated Spigot	m	4			
4/1/639	Ø200mm Un-insulated Spigot	m	188			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/640	Ø250mm Un-insulated Spigot	m	5			
4/1/641	Ø300mm Un-insulated Spigot	m	8			
4/1/642	Ø350mm Un-insulated Spigot	m	12			
<u>Extra Over Fittings For Round Ducting Ducting.</u>						
4/1/643	Ø100mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	5			
4/1/644	Ø150mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	2			
4/1/645	Ø200mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	82			
4/1/646	Ø250mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	2			
4/1/647	Ø300mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	4			
4/1/648	Ø350mm Un-insulated Duct Fittings - 90°bends, 45°bends, 15° bends etc.	No	8			
<u>Insulated flexible ducting below steel trusses or concrete soffits including metal jubilee clamps & support mechanisms.</u>						
4/1/649	Ø100mm Un-insulated flexible duct	m	4			
4/1/650	Ø150mm Un-insulated flexible duct	m	4			
4/1/651	Ø200mm Un-insulated flexible duct	m	188			
4/1/652	Ø250mm Un-insulated flexible duct	m	4			
4/1/653	Ø300mm Un-insulated flexible duct	m	16			
4/1/654	Ø350mm Un-insulated flexible duct	m	4			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

<u>AIR TERMINALS</u>					
4/1/655	Diffusion & Grilles 595x595, Ø150 Brian Rickard VAV Diffuser c/w 0.5kW Re-heater, air-flow switch, - Powder coated hospital white finish	No	1		
4/1/656	595x595, Ø200 Brian Rickard VAV Diffuser c/w 1.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	28		
4/1/657	595x595, Ø250 Brian Rickard VAV Diffuser c/w 1.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	16		
4/1/658	595x595, Ø300 Brian Rickard VAV Diffuser c/w 2.0kW Re-heater, air-flow switch - Powder coated hospital white finish	No	6		
4/1/659	595x595, Ø350 Brian Rickard VAV Diffuser c/w 2.5kW Re-heater, air-flow switch - Powder coated hospital white finish	No	1		
4/1/660	Ø150 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	1		
4/1/661	Ø200 Metal Extract Air Disc Valves - Powder coated hospital white finish	No	49		
4/1/662	600x600 standard return air gille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	1		
4/1/663	1200x600 standard return air gille type RA with curved blade c/w plenum box over, Ø350 spigot connections, spigot balancing damper & washable filter - Powder coated hospital white finish	No	7		
4/1/664	300x300 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1		
4/1/665	400x400 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	1		
Carried to Trade Summary					
MECHANICAL INSTALLATION Bill No. 1					
HVAC INSTALLATION					
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					
					R

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/666	500x500 Extract Air Grille with adjustable aerofoil blade c/w OBD, associated spigot connection & Powder coated hospital white finish	No	13			
4/1/667	Door grilles, no sight core, auxiliary frame / flange both sides of door, fixing screws. 450x450mm Door grilles - Powder coated hospital white finish	No	30			
4/1/668	Weather Louvres 800x800mm Weather louvre c/w plenum box & W.M.S	No	4			
4/1/669	Air Control Dampers Ø150 Butterfly damper c/w lockable quadrant	No	2			
4/1/670	Ø200 Butterfly damper c/w lockable quadrant	No	2			
4/1/671	Ø250 Butterfly damper c/w lockable quadrant	No	2			
4/1/672	Ø300 Butterfly damper c/w lockable quadrant	No	2			
4/1/673	Ø350 Butterfly damper c/w lockable quadrant	No	29			
4/1/674	Ø400 Butterfly damper c/w lockable quadrant	No	2			
4/1/675	1900x800mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2			
4/1/676	700x700mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	2			
4/1/677	650x600mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/678	600x550mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/679	350x300mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/680	300x300mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/681	300x250mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/682	250x300mm Motorised Pressure Control Damper(PCD) c/w Push-pull actuator and duct static pressure sensor.	No	1			
4/1/683	Fire Dampers Ø200mm Motorised fire damper	No	2			
4/1/684	200 x 200mm Motorised fire damper	No	1			
4/1/685	350 x 350mm Motorised fire damper	No	2			
4/1/686	600 x 500mm Motorised fire damper	No	2			
4/1/687	Heater Banks 800x800mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/688	700x700mm 10kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/689	600x600mm 7.5kW Proportional Control (PHB) Heater bank c/w auto & manual reset overheat cut out, airflow cut-out & temperature senser.	No	1			
4/1/690	Multiloop Modular VAV Diffuser Controls MLM Power Supply Unit (PSU2).	No	4			
4/1/691	BACnet MS/TP Master Communication Unit Channel (MCU) for PSU2 units.	No	1			
4/1/692	Rickard VAV inter-diffuser cabling.	No	250			
4/1/693	MLM Wall mount thermostat temperature controller.	No	32			
<u>WIRE-WAYS</u>						
<u>Conduits, cable tray, trunkings, c/w fittings, hangers and accessories</u>						
4/1/694	25mm Galvanised steel conduit	m	320			
4/1/695	25mm One way entry round conduit box	No	10			
4/1/696	25mm Two way entry round conduit box	No	10			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/697	25mm Three way entry round conduit box	No	10			
4/1/698	25mm Four way entry round conduit box	No	52			
4/1/699	20mm Galvanised steel conduit	m	40			
4/1/700	20mm One way entry round conduit box	No	10			
4/1/701	20mm Two way entry round conduit box	No	10			
4/1/702	20mm Three way entry round conduit box	No	10			
4/1/703	20mm Four way entry round conduit box	No	20			
4/1/704	100x50 Galvanised steel box	No	32			
4/1/705	150x50mm Medium duty cable trays	m	200			
4/1/706	150mm Medium duty galvanised steel cable trunking c/w cover	m	20			
4/1/707	CHILLERS Supply, installation and commissioning of air cooled chiller unit, complete with gas charged refrigeration system, hydronic pumps, expansion tank, electrical switch board, controls and factory tested. 680kW De-rate net cooling capacity, scroll reversable air source heat pump chiller.	No	2			
	<u>Chilled water</u> <u>chilled water-entering - 6°C</u> <u>chilled water-leaving coil - 12 °C</u>					
	<u>Heating</u> <u>Total heating capacity - 745kW</u>					
	<u>Ambiant condition</u> <u>Ambiant - 36°C</u>					
	<u>Elevation</u> <u>Altitude - 1184m</u>					
4/1/708	Primary chilled water pump, constant speed operation c/w frame, anti vibration spring mounts and stainless steel drip tray. Pump Duty 28L/s at 10m head pressure, high pressure seals, 1440rpm. Pumps to be rated to handle 60°C water.	No	2			
	Carried to Trade Summary					
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/1/709	Secondary chilled water pump, constant speed operation c/w frame, anti vibration spring mounts and stainless steel drip tray. Pump Duty 28L/s at 25m head pressure, high pressure seals, 1440rpm. Pumps to be rated to handle 60°C water.	No	2			
4/1/710	Electrical Variable Speed Drive, suitable for the selection of the secondary pump.	No	2			
4/1/711	Water Treatment Plant Automatic dosing water treatment plant including all piping, funnels, valves, controls, wiring, switches, timers, sensors, reservoirs, etc.	No	1			
4/1/712	Dosing chemicals supply of 12 months	No	1			
4/1/713	Hot dipped galvanised expansion tank, roof mounted, with removable lid, ball valve and drain, overflow, expansion and make-up water pipe connections. 1m3 Expansion Tank	No	1			
4/1/714	Buffer tank c/w insulation and cladding 2500L Buffer tank	No	1			
4/1/715	Motor Control Center (MCC) Supply install MCC complete with controls, wiring external and internal of panel, conduits, cables, draw boxes, switch boxes, cable racks, cable ducts, contactors, relays, and all necessary components to make the system functional etc.	No	1			
4/1/716	Automatic air vents Automatic air vents, with stop cock for manual use	No	20			
<u>Butterfly Valves</u>						
4/1/717	Ø150mm Butterfly valves	No	18			
4/1/718	Ø100mm Butterfly valves	No	16			
4/1/719	Ø80mm Butterfly valves	No	10			
4/1/720	Ø65mm Butterfly valves	No	20			
4/1/721	Ø50mm Butterfly valves	No	4			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/722	Ø40mm Butterfly valves	No	4			
4/1/723	Ø20mm Butterfly valves	No	4			
<u>Non Return Valves</u>						
4/1/724	Ø150mm Non-Return valve	No	8			
<u>Strainers</u>						
4/1/730	Ø150mm Strainer	No	8			
4/1/731	Ø80mm Strainer	No	2			
4/1/732	Ø65mm Strainer	No	6			
4/1/733	Ø50mm Strainer	No	2			
4/1/734	Ø40mm Strainer	No	2			
4/1/735	Ø20mm Strainer	No	2			
<u>Bellows pump connector/Pump Flexible Connection</u>						
4/1/736	Ø150mm Bellow pump connection	No	6			
<u>Flow switch</u>						
4/1/737	Ø150mm Flow switch	No	2			
<u>3-Way Actuated Bypass Valve</u>						
4/1/738	Ø200mm 3-Way bypass valve	No	1			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

	<u>2-Way Actuated modulating STAD balancing valve</u>				
4/1/739	Ø80mm 2-Way actuated balancing valve	No	1		
4/1/740	Ø65mm 2-Way actuated balancing valve	No	4		
4/1/741	Ø50mm 2-Way actuated balancing valve	No	1		
4/1/742	Ø40mm 2-Way actuated balancing valve	No	1		
4/1/743	Ø20mm 2-Way actuated balancing valve	No	1		
4/1/744	Gauges Temperature guage on sockets weld	No	26		
4/1/745	Pressure guage on sockets weld	No	30		
	<u>CHILLED WATER PIPING DISTRIBUTION SYSTEM</u>				
	<u>Chilled water piping system, including hangers, supports, brackets, insulation where and as specified, pipe sleeves and plates, 'Binda' fittings, painting, flexible connections at pumps, strainers, valves, thermometer pockets, siphon tubes, etc.</u>				
	<u>Welded black mild steel chilled water pipes, SABS 719 c/w 50 mm thick insulation, covered with vapour barrier.</u>				
4/1/746	Ø200mm Insulated Header Pipe	m	20		
4/1/747	Ø150mm Insulated Pipe	m	302		
4/1/748	Ø100mm Insulated Pipe	m	297		
4/1/749	Ø80mm Insulated Pipe	m	247		
4/1/750	Ø65mm Insulated Pipe	m	237		
4/1/751	Ø50mm Insulated Pipe	m	20		
4/1/752	Ø40mm Insulated Pipe	m	20		
4/1/753	Ø20mm Insulated Pipe	m	128		
	Carried to Trade Summary			R	
	MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>Extra over for black medium class fittings c/w 50 mm thick insulation, covered with vapour barrier and cladded with galvanised sheet metal.</u>			
	<u>Welded 90° Elbows ASTM A234 WPB long radius</u>			
4/1/754	Ø200mm	No	20	
4/1/755	Ø150mm	No	120	
4/1/756	Ø100mm	No	80	
4/1/757	Ø80mm	No	60	
4/1/758	Ø65mm	No	56	
4/1/759	Ø50mm	No	52	
4/1/760	Ø40mm	No	40	
4/1/761	Ø20mm	No	40	
	<u>Welded Equal Tees ASTM A234 WPB</u>			
4/1/762	Ø200mm	No	40	
4/1/763	Ø150mm	No	30	
4/1/764	Ø100mm	No	10	
4/1/765	Ø80mm	No	10	
4/1/766	Ø65mm	No	10	
4/1/767	Ø50mm	No	10	
4/1/768	Ø40mm	No	10	
4/1/769	Ø20mm	No	11	
	<u>Welded Concentric reducers ASTM A234</u>			
4/1/770	Ø200mm-Ø150mm	No	20	
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION			
	Bill No. 1			
	HVAC INSTALLATION			
	DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/1/771	Ø150mm-Ø100mm	No	20			
4/1/772	Ø100mm-Ø80mm	No	20			
4/1/773	Ø80mm-Ø65mm	No	20			
4/1/774	Ø65mm-Ø50mm	No	20			
4/1/775	Ø50mm-Ø40mm	No	20			
4/1/776	Ø40mm-Ø32mm	No	20			
4/1/777	Ø32mm-Ø20mm	No	20			
<u>Flanges including gaskets, bolts, nuts and washers, carbon steel SABS 1123, type 600013</u>						
4/1/778	Ø200mm (Pair)	No	70			
4/1/779	Ø150mm (Pair)	No	60			
4/1/780	Ø100mm (Pair)	No	20			
4/1/781	Ø80mm (Pair)	No	20			
4/1/782	Ø65mm (Pair)	No	20			
4/1/783	Ø50mm (Pair)	No	20			
4/1/784	Ø40mm (Pair)	No	20			
4/1/785	Ø20mm (Pair)	No	20			
<u>Galvanised screwed condensate drain water piping</u>						
4/1/786	Ø50mm	No	80			
4/1/787	Ø40mm	No	60			
4/1/788	Ø32mm	No	20			
4/1/789	Ø25mm	No	40			
4/1/790	Ø20mm	No	50			
Carried to Trade Summary						
MECHANICAL INSTALLATION						
Bill No. 1						
HVAC INSTALLATION						
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Extra over for galvanised fittings</u>				
<u>Galvanised screwed 90° bends</u>					
4/1/791	Ø50mm Bend	No	48		
4/1/792	Ø40mm Bend	No	20		
4/1/793	Ø32mm Bend	No	20		
4/1/794	Ø25mm Bend	No	20		
4/1/795	Ø20mm Bend	No	20		
<u>Galvanised screwed equal Tee</u>					
4/1/796	Ø50mm Tee	No	6		
4/1/797	Ø40mm Tee	No	6		
4/1/798	Ø32mm Tee	No	6		
4/1/799	Ø25mm Tee	No	6		
4/1/800	Ø20mm Tee	No	6		
<u>X-ray testing and examination of chilled water pipes by an approved authority.</u>					
4/1/801	X-Ray chilled water piping welds	No	30		
<u>PROVISIONAL SUMS</u>					
<u>Include the following Provisional Sums (which may be utilised or omitted at the discretion of the Engineer), in the Tender Price</u>					
4/1/802	Provisional Sum for BMS Complete System c/w Workstation			SUM	
<u>Carried to Trade Summary</u>					
MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 4	Page No	Amount R
MECHANICAL INSTALLATION		
Bill No. 1		
HVAC INSTALLATION		
<u>COLLECTION PAGE</u>		
Total Brought Forward from Page No.	160	
Total Brought Forward from Page No.	161	
Total Brought Forward from Page No.	162	
Total Brought Forward from Page No.	163	
Total Brought Forward from Page No.	164	
Total Brought Forward from Page No.	165	
Total Brought Forward from Page No.	166	
Total Brought Forward from Page No.	167	
Total Brought Forward from Page No.	168	
Total Brought Forward from Page No.	169	
Total Brought Forward from Page No.	170	
Total Brought Forward from Page No.	171	
Total Brought Forward from Page No.	172	
Total Brought Forward from Page No.	173	
Total Brought Forward from Page No.	174	
Total Brought Forward from Page No.	175	
Total Brought Forward from Page No.	176	
Total Brought Forward from Page No.	177	
	Carried Forward	
MECHANICAL INSTALLATION		R
Bill No. 1		
HVAC INSTALLATION		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 4 MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <u>COLLECTION PAGE</u>	Brought Forward	Page No	R	Amount R
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 Brought Forward from Page No.		194		
Carried Forward			R	
MECHANICAL INSTALLATION				
Bill No. 1				
HVAC INSTALLATION				
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 4 MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <u>COLLECTION PAGE</u>	Brought Forward	Page No	R	Amount R
Total Brought Forward from Page No.	195			
Total Brought Forward from Page No.	196			
Total Brought Forward from Page No.	197			
Total Brought Forward from Page No.	198			
Total Brought Forward from Page No.	199			
Total Brought Forward from Page No.	200			
Total Brought Forward from Page No.	201			
Total Brought Forward from Page No.	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			
Carried Forward			R	
MECHANICAL INSTALLATION				
Bill No. 1				
HVAC INSTALLATION				
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Section No. 4 MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <u>COLLECTION PAGE</u>	Brought Forward	Page No	R	Amount R
Total Brought Forward from Page No.		212		
Total Brought Forward from Page No.		213		
Total Brought Forward from Page No.		214		
Total Brought Forward from Page No.		215		
Total Brought Forward from Page No.		216		
Total Brought Forward from Page No.		217		
Total Brought Forward from Page No.		218		
Total Brought Forward from Page No.		219		
Total Brought Forward from Page No.		220		
Total Brought Forward from Page No.		221		
Total Brought Forward from Page No.		222		
Carried Forward to Summary of Section No. MECHANICAL INSTALLATION Bill No. 1 HVAC INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

Item No		Quantity	Rate	Amount R
	<u>PRELIMINARY & GENERAL COSTS</u>			
4/2/1	P&G's cost to comply with principal contractor's terms and conditions	Item		
4/2/2	Site Establishment	Item		
4/2/3	Compilation of Health and Safety Plan and file as per requirements, latest construction regulations <u>and in accordance with client's OHS specification.</u>	Item		
4/2/4	SHOP DRAWINGS - Provision of all Shop drawings which must be final as-built drawings	Item		
4/2/5	HYDRAULIC CALCULATIONS - Submission of full hydraulic calculations as per specification.	Item		
4/2/6	CADDED "As Installed" drawings as specified	Item		
4/2/7	TEST and COMMISSIONING of complete Works to engineer and client satisfaction. Allow for <u>the required labour to successfully complete pipework pressure testing and commissioning of systems with commissioning data and report for handover.</u>	Item		
4/2/8	CERTIFICATION - Allow for certification of systems and components on completion of work in <u>terms of ASIB including certificate of compliance.</u>	Item		
4/2/9	TRAINING of staff in use & maintenance of installed fire sprinkler systems	Item		
4/2/10	Allow for the compilation of detailed OPERATIONAL and MAINTENANCE MANUALS (with all	Item		
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<p><u>test results, "as-built" drawings, equipment specs etc.) and all required documentation for maintenance and for handover according to engineer's specification (3 sets of hardcopy files and electronic copy)</u></p>			
4/2/11	<p>FIRST YEAR MAINTENANCE AND GUARANTEE - comprehensive free maintenance for a period</p> <p><u>of 12 months against defects in equipment and material (wear & tear is excluded). This includes inspections as per maintenance requirements and to be called as and when they are related problems during this period (1 year period begins only after main contract handover)</u></p>	Item		
4/2/12	<p>THIRD PARTY INSPECTION - Provide and arrange a third party inspection in accordance with ASIB and</p> <p><u>allow for a re-inspection should it be required</u></p> <p>Bill of Quantities to be read in conjunction with all relevant drawings and specification documentation. Any queries or discrepancies should be brought up with the Engineer to ensure compliance with the scope of works. The systems must be in full operation at handover. Any missing items or equipment that will be required for completion of the job must be noted under 'additional items' in this bill. No VO will be entertained unless additional scope is given in writing by the Engineer.</p>	Item		
	<p><u>SPRINKLER PUMPS AND TANKS</u></p> <p><u>TANK INFILL MAINS PIPEWORK (COMPLETE)</u></p>			
4/2/13	<p>Supply, delivery, installation, connection, testing and commissioning of tank infill mains (including breaking in, priming and painting, valves, bends, fittings, supports, etc.) to the sprinkler tanks etc.</p>	m	80	
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>SPRINKLER WATER TANK - 150 m³ Effective tank capacity</u>				
4/2/14	Circular tank complete with vortex inhibitor, valves, low level alarm, water level indicators, hatches, cat ladders, drains and overflows.	Nr	2		
	<u>HYDRANT WATER TANK - 80 m³ Effective tank capacity</u>				
4/2/15	Sectional Steel tank complete with vortex inhibitor, valves, low level alarm, water level indicators, hatches, cat ladders, drains and overflows.	Nr	1		
	<u>ELECTRIC SPRINKLER PUMPSET in accordance with ASIB (COMPLETE)</u>				
4/2/16	Supply, delivery, installation, connection, testing and commissioning of Diesel Pump set as per ASIB requirements with following characteristics: * Pump duty 2200 L/min at 585 Kpa Note: Sub-contractor to complete pipe sizing / detailed design to remain within the pump curve.	Nr	1		
	<u>DIESEL DRIVEN SPRINKLER PUMPSET in accordance with ASIB (COMPLETE)</u>				
4/2/17	Supply, delivery, installation, connection, testing and commissioning of Diesel Pump set as per ASIB requirements with following characteristics: * Pump duty 2200 L/min at 585 Kpa Note: Sub-contractor to complete pipe sizing / detailed design to remain within the pump curve.	Nr	1		
	<u>JOCKEY PUMP (COMPLETE)</u>				
4/2/18	Supply, delivery, installation, testing and commissioning of jockey pump to specification.	Nr	1		
	<u>Carried to Trade Summary</u>			R	
	MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

4/2/19	PUMPROOM PIPEWORK (COMPLETE) Design, supply, delivery, installation, testing and commissioning of pump house pipework of heavy duty steel (including auto start arrangements, proving test arrangement (flow meter, etc.)		Item			
4/2/20	ANNUNCIATOR PANEL (COMPLETE) Supply, delivery, installation, connection, testing and commissioning of annunciator panel	Nr	1			
4/2/21	ELECTRICAL INSTALLATION (COMPLETE) Supply, delivery, installation, testing and commissioning of all electrical work in the pump house, excluding distribution board.		Item			
4/2/22	SIGNAGE Allow for the production & fixing of all statutory signs on chromadek or similar approved material.		Item			
4/2/23	PLANT ROOM PIPING - INCL TRUNK MAINS PIPEWORK Design, supply, delivery, installation, connection, testing and commissioning of one Low pressure Medium quality black steel stage trunk mains from pump house to installation control valves (including all valves, bends, fittings, supports, etc.)	m	60			
4/2/24	PLANT ROOM SPRINKLERS Exposed sprinklers in the pump house - Brass upright (141°C Std. Response)	Nr	42			
4/2/25	DIESEL TANK Include for Diesel tank storage	Nr	1			
4/2/26	DIESEL EXHAUST Allow for the design, manufacturing, installation, painting, lagging, testing and commissioning of diesel exhaust to termination outside the building.	Nr	1			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

	<u>CONTROL, ALARM, BOOSTING, SIGNAGE AND AUXILIARY ITEMS</u>			
	<u>SPRINKLER INSTALLATION CONTROL VALVES (COMPLETE DESIGN AS PER ASIB)</u> <u>Design, supply, delivery, installation, connection, testing and commissioning of Installation Control Valve assemblies, including manifolds, valves, painting etc. In Accordance with ASIB.</u>			
4/2/27	Ø100mm ICV complete	Nr	3	
4/2/28	SIGNAGE <u>Allow for the production & fixing of the following signs as per the specification in this document:</u> <u>"SPRINKLER STOP VALVE INSIDE" ; "SPRINKLER BOOSTER CONNECTION PRESSURE LIMIT"</u> <u>Identification of valves in valve chamber;</u> <u>Identification of terminal test valves; Schematic block plan on chromadek or similar approved material.</u>	Item		
4/2/29	AUXILIARY EQUIPMENT <u>Allow for all auxiliary equipment as specified in this document as well as the ASIB standard , including valves, fittings, supports, spare plugs, sprinkler cabinet, sprinkler spanner, chains and locks, etc.</u>	Item		
4/2/30	FLOW SWITCHES <u>Supply, delivery, installation, testing and commissioning of water flow switches for connection by others.</u> <u>SPRINKLER PROTECTION</u> <u>ROOF SPRINKLERS</u>	Nr	3	
	Carried to Trade Summary		R	
	MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			

	<u>Design, supply, delivery, installation, testing and commissioning of a completely functioning sprinkler installation in accordance with specifications, ASIB Rules to the areas - including connecting pipework to ICVs and all additional pipework to accommodate coordination of services and off-sets around structure, supports, etc. required. c/w piping, fitting, painting, hanging ETC. (5mm/min/m² design density 68°C operating temperature)</u>				
<u>GROUND FLOOR</u>					
4/2/31	BLOCK A 68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	144		
4/2/32	BLOCK B 68°C exposed brass up-right spray roof sprinklers c/w all associated pipework and supports.	Nr	12		
4/2/33	68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	84		
4/2/34	BLOCK C 68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	180		
4/2/35	BLOCK D 68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	184		
4/2/36	SPRINKLER MAINS Ø100 Sprinkler mains at roof level (including priming and painting, bends, fittings, supports, etc.)	m	446		
4/2/37	REMOTE TEST VALVES <u>Allow for galvanised steel remote test valves to detail with lock and approved valve.</u>	Nr	6		
<u>FIRST FLOOR</u>					
4/2/38	68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	262		
<u>Carried to Trade Summary</u>					
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/2/39	SPRINKLER MAINS Ø100 Sprinkler mains at roof level (including priming and painting, bends, fittings, supports, etc.)	m	210			
4/2/40	REMOTE TEST VALVES <u>Allow for galvanised steel remote test valves to detail with lock and approved valve.</u>	Nr	4			
<u>SECOND FLOOR</u>						
4/2/41	68°C quick response pendant ceiling sprinkler c/w with all associated pipework and supports.	Nr	153			
<u>SPRINKLER MAINS</u>						
4/2/42	Ø100 Sprinkler mains at roof level (including priming and painting, bends, fittings, supports, etc.)	m	70			
4/2/43	REMOTE TEST VALVES <u>Allow for galvanised steel remote test valves to detail with lock and approved valve.</u>	Nr	2			
4/2/44	Any Items not listed (Specify) Bill of Quantities to be read in conjunction with all relevant drawings and specification documentation. Any queries or discrepancies should be brought up with the Engineer to ensure compliance with the scope of works. The systems must be in full operation at handover. Any missing items or equipment that will be required for completion of the job must be noted under 'additional items' in this bill. No VO will be entertained unless additional scope is given in writing by the Engineer.	Item				
<u>HYDRANTS & HOSE REELS</u>						
<u>GROUND FLOOR</u>						
<u>BLOCK A</u>						
4/2/45	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	1			
4/2/46	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	3			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/2/47	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	95			
4/2/48	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	6			
4/2/49	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	34			
<u>BLOCK B</u>						
4/2/50	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	1			
4/2/51	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	2			
4/2/52	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	50			
4/2/53	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	4			
4/2/54	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	22			
<u>BLOCK C</u>						
4/2/55	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	1			
4/2/56	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	2			
4/2/57	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	45			
4/2/58	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	4			
4/2/59	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	35			
<u>BLOCK D</u>						
4/2/60	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	1			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						
R						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/2/61	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	2			
4/2/62	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	45			
4/2/63	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	4			
4/2/64	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	36			
<u>FIRST FLOOR - FIRE PROTECTION</u>						
4/2/65	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	2			
4/2/66	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	4			
4/2/67	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	10			
4/2/68	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	10			
4/2/69	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	44			
<u>SECOND FLOOR - FIRE PROTECTION</u>						
4/2/70	80mm x 65mm RIGHT ANGLE TAMPERPROOF FIRE HYDRANT c/w fittings as per SANS 1128-1	Nr	1			
4/2/71	30m FIRE HOSE REEL c/w fittings as per SANS 543	Nr	2			
4/2/72	100mm BMS FIRE PIPE c/w FITTINGS, PAINTING AS PER SPEC	m	10			
4/2/73	4.5kg DRY CHECMICAL POWDER FIRE EXTINGUISHER as per SANS 1910	Nr	4			
4/2/74	5kg CO2 FIRE EXTINGUISHER as per SANS 1911	Nr	1			
4/2/75	PHOTOLUMINESCENT TYPE FIRE SIGNAGE c/w FITTINGS as per SANS 1186-1	Nr	32			
<u>Carried to Trade Summary</u>						
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/2/76	2-PORT BOOSTER CONNECTION c/w 2500 kPa PRESSURE GAUGE	Nr	1		
4/2/77	Fire Stopping			SUM	
Carried to Trade Summary					
MECHANICAL INSTALLATION Bill No. 2 FIRE SERVICES DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					
R					

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Item No		Quantity	Rate	Amount R
	<p><u>Compliance</u> <u>Rates and prices to include costs for fulfilling all obligations or liabilities to complete Works in accordance with the Contract.</u></p> <p><u>The Main Contract</u> <u>The Subcontractor shall include for all relevant costs required to fulfil such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract, as included in the "General Conditions" and the "Particular Conditions" of the Contract</u></p>			
4/3/1	Plant, Materials and Workmanship	Item		Rate Only
4/3/2	Tests on Completion	Item		
4/3/3	Insurance	Item		Rate Only
4/3/4	Site Establishment	Item		Rate Only
	<p><u>The Subcontract</u> <u>The Subcontractor shall include for all relevant costs required to fulfil his obligations in the Subcontract including, if applicable, any particular requirements arising under or in connection with his Subcontract agreement with the Contractor</u></p>			
4/3/5	Provision and use of drawings and documents	Item		
4/3/6	Co-ordination drawings Subcontractor shall include costs for preparation of all drawings showing the coordination and inter-relationship of the Subcontract Work and their integration into the architectural, structural and engineering services elements in detail Installation drawings	Item		
4/3/7	Subcontractor shall include costs for preparation of all installation drawings as included in Contract, and as may be necessary to instruct his personnel in the proper execution of the Subcontract Work Builder's work information drawings	Item		Rate Only
	Carried to Trade Summary		R	
	MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/8	Subcontractor shall include costs for preparation of all builder's work information drawings prepared to show requirements for architectural or structural provisions necessary to facilitate the execution of the Subcontract works Equipment & Materials submittals	Item	Rate Only
4/3/9	Subcontractor shall include costs for the preparation of all Subcontractor's Equipment & Materials submittals as included in the Contract, and as may be necessary for verifying compliance with the Contract Record or 'As-built' drawings	Item	
4/3/10	Subcontractor shall include costs for the preparation and submission of 'As-built' drawings providing an accurate record of the whole of the services as installed in the execution of the Subcontract Works Operation and Maintenance manuals	Item	Rate Only
4/3/11	Subcontractor shall include costs for the preparation and submission of O&M Manuals giving details all installed plant and equipment in the Subcontract Works Management of time/quality/cost	Item	
4/3/12	Samples	Item	Rate Only
4/3/13	Subcontractor shall include costs for the provision of physical samples of all items of Plant and Materials to be installed in the execution of the Subcontract Works, and as included in the Contract Manufacturer's Guarantees and Warranties	Item	
<p><u>Subcontractor shall include costs for obtaining and maintaining guarantees and warranties up to the end of the Defects Notification Period for all equipment installed in the Subcontract Works, including obtaining any extended guarantees for materials procured early into the Contract period</u></p>			
4/3/14	Training The Sub contractor shall provide and administer a training program to furnish the Employer's Staff with a thorough understanding of all equipment, components, systems, and their operation, including appropriate how-to skills	Item	
Carried to Trade Summary			
<p>MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/3/15	<p>MEDICAL AIR PLANT ROOM Medical Compressed Air Plantroom Supply, install, test and commission entire compressed air plant, feeding both medical air system (400 kPa) and surgical air system (700 kPa) as detailed on the drawings and specified elsewhere, summarised as follows: 1200l/min Rotary screw type compressors for medical compressed air, anti-vibration mountings and ducted intakes, with in-built dessicant drier, -35°C Pressure dewpoint at 7 bar as specified.</p>	No	2		
4/3/16	Air receiver, 1000 litres, vertical with electric solenoid drain, guage, safety and isolation valves	No	1		Rate Only
4/3/17	Filters The first stage - coalescer filters as specified.	No	2		Rate Only
4/3/18	The second stage - general purpose filters as specified	No	2		Rate Only
4/3/19	The final stage - activated carbon filters as specified	No	2		Rate Only
<u>Supply, install, test and commission entire medical and surgical air plant, as detailed on the drawings and specified elsewhere, summarised as follows:</u>					
4/3/20	Medical air manifold 2 x 10 cylinders change over assembly, regulators, guages, pigtails and associated signalisation, as specified	No	1		
4/3/21	Cylinder brackets	No	20		
4/3/22	Valves & sundries Isolation valves on medical grade copper pipe line 41,28 mm	No	10		
4/3/23	Isolation valves on medical grade copper pipe line 34,93 mm	No	4		
4/3/24	Flexible connections for 34.93 mm pipe	No	2		
4/3/25	Non-return valves on medical grade copper pipe 34.93 mm @ max 1200 kPa	No	4		
Carried to Trade Summary					
<p>MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/3/26	Pipework Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348 fixed to open trunking OD 41.28mm	m	15			
4/3/27	OD 34.93mm	m	15			
4/3/28	OD 15.88mm(drain)	m	40			
4/3/29	OD 12.70mm(drain)	m	2			
4/3/30	Pipework fittings - bends 41.28mm	No	6			
4/3/31	34.93mm	No	15			
4/3/32	15.88mm	No	10			
4/3/33	12.70mm	No	4			
4/3/34	Pipework fittings - tees 41.28mm	No	2			
4/3/35	34.93mm	No	9			
4/3/36	Line safety pressure relief valve set 1210 kPa on air receiver	No	1			
4/3/37	770 kPa on 41.28 mm surgical air	No	1			
4/3/38	510 kPa on 34.53 mm medical air	No	1			
4/3/39	460 kPa on 22.23 mm emergency air	No	1			
4/3/40	Differential pressure switch for filters(volt free contact)	No	8			
4/3/41	Line pressure regulating valves From 1000 kPa to 700 kPa adjustable	No	2			
4/3/42	From 1000 kPa to 400 kPa adjustable	No	2			
4/3/43	Strainers in drain lines 15 mm	No	9			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/44	Solenoid valves in drain lines 15 mm	No	9			
4/3/45	Pressure gauges 0 - 1500 kPa	No	6			
4/3/46	Final Electrical Connection to Equipment		Item			
4/3/47	Label piped gases installation in plantroom		Item			
4/3/48	Pipework supports Open type, medium duty, trays 100mm wide for piped reticulation inclusive of tertiary supports and fixing on the provided unistrut members at 1200mm distances	m	60			
4/3/49	Labelling of pipework, equipment, and accessories		Item			
4/3/50	Controls and Electrical Connection To Equipment			SUM		
4/3/51	Test and commission the piped gases installation within Compressed Air Room			SUM		
4/3/52	MEDICAL VACUUM PLANT ROOM Medical Vacuum Plantroom Supply, install, test and commission the entire vacuum plant, as detailed on the drawings and specified elsewhere, summarised as follows: 140m3/h Medical vacuum pumps, air cooled, rotary screw/vane type, with antivibration mountings.	No	3			
4/3/53	Receiver tank, 1800 litres horizontal with gauge ,isolation valves and fittings as specified	No	1			
4/3/54	Bacterial filter arrangement (duplex) with drain points as specified	No	1			
4/3/55	Vacuum trap (duplex)with 53.98mm pipe conectors and detachable sterilizable bottle.	No	2			
4/3/56	Valves & sundries Isolation valves on medical grade copper pipe line i) OD 41,28mm	No	2			
4/3/57	ii) OD 34,93mm	No	12			
4/3/58	iii) Pressure gauges for vacuum	No	3			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

4/3/59	iv) Differential pressure switches	No	2		
4/3/60	iv) Manual drain trap	No	1		
4/3/61	v) Double check valves on 41,28mm pipe line	No	2		
4/3/62	vi) Reinforced flexible pipe connections	No	2		
4/3/63	Pipes and fittings Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348. OD 41,28mm	m	21		
4/3/64	OD 53.98mm	m	2		
4/3/65	Class 12 PVC welded pipe. (exhaust) OD 76mm	m	16		
4/3/66	Class 12 PVC fittings Elbows OD 76mm	No	10		
4/3/67	Class 12 Reducing socket 76-54mm	No	3		
4/3/68	Insect mesh cover 76mm	No	2		
4/3/69	Brazed fittings Bends i) 53.98mm	No	2		
4/3/70	ii) 79mm	No	7		
4/3/71	Tees i) 79mm	No	4		
4/3/72	Reducers 79 - 54mm	No	6		
4/3/73	Pipework supports i) Open type, medium duty, trays 100mm wide for piped reticulation inclusive of tertiary supports and fixing on the provided unistrut members at 1200mm distances	m	50		
4/3/74	ii) Labelling of pipework, equipment, and accessories		Item		
Carried to Trade Summary					
MECHANICAL INSTALLATION					
Bill No. 3					
MEDICAL GAS INSTALLATION					
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/75	Controls and Electrical Connection To Equipment (Included)			SUM		
4/3/76	iii) Test and commission the Vacuum Plant Room Equipment			SUM		
4/3/77	MEDICAL OXYGEN PLANT ROOM Medical Oxygen Plantroom Supply, install, test and commission entire Oxygen plant, as detailed on the drawings and specified elsewhere, summarised as follows: Full TPA oxygen panel complete with two bypass lines, PSA connection, double regulation, manifold 2 x 10 cylinders with automatic change over assembly and associated signalisation, as specified	No	1			
4/3/78	Cylinder brackets	No	20			
4/3/79	Pipework Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348. Pipework i) OD 41.28mm	m	10			
4/3/80	ii) 34.93mm	m	10			
4/3/81	Brazed fittings Bends i) 41.28mm	No	4			
4/3/82	ii) 34.93mm	No	3			
4/3/83	Reducers i) 42 - 35 mm	No	1			
4/3/84	ii) 35 - 22mm	No	1			
4/3/85	Label piped gases installation within plantroom			Item		
4/3/86	Controls and Electrical connection				SUM	
4/3/87	Test and commission piped gases installation within the manifold				SUM	
	Carried to Trade Summary				R	
	MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/3/88	Supply, install, test and commission entire 63Nm3/h Oxygen PSA plant, as detailed on the drawings and specified elsewhere, summarised as follows:	No	1			
4/3/89	3m3 Oxygen tank	No	1			
4/3/90	Master Alarm	No	1			
4/3/91	Full oxygen panel complete with PSA connection, manifold 2 x 10 cylinders with automatic change over assembly and associated signalisation, as specified	No	1			
<p><u>Main Reticulation Pipework</u> <u>Supply, deliver, install test and commission</u> <u>complete piped gases installation in the Service</u> <u>Tunnel as detailed below.</u></p> <p><u>Pipework</u> <u>Medical grade copper tubes with brazed joints in</u> <u>accordance with BS EN 737-1 and BS EN 13348</u></p>						
4/3/92	i) OD 53.98 mm	m	216			
4/3/93	ii) OD 41.28 mm	m	216			
4/3/94	iii) OD 34.93 mm	m	216			
4/3/95	iv) OD 28.58mm	m	216			
<p><u>Pipework fittings - Tees</u> <u>Medical grade copper brazed joints in accordance</u> <u>with BS EN 737-1 and BS EN 13348</u></p>						
4/3/96	i) OD 53.98 mm	No	30			
4/3/97	ii) OD 41.28 mm	No	25			
4/3/98	iii) OD 34.93 mm	No	20			
4/3/99	v) OD 28.58 mm	No	20			
<p>Carried to Trade Summary</p> <p>MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>						

4/3/118	Test and commission the piped gases installation for main reticulation.	Item			
<u>GROUND FLOOR: BLOCK C</u>					
4/3/119	Supply, deliver, install test and commission complete piped gases installation for Block C as detailed below. Pipework Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348	m	33		
4/3/120	i) OD 34.93 mm	m	145		
4/3/121	ii) OD 22.23 mm	m	180		
4/3/122	iv) OD 15.88 mm	m	140		
4/3/123	v) OD 12.70 mm	m	80		
4/3/124	vi) OD 9.53 mm	m			
4/3/125	Pipework fittings - tees Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348	No	6		
4/3/126	i) OD 34.93 mm	No	8		
4/3/127	ii) OD 28.58 mm	No	20		
4/3/128	iii) OD 22.23 mm	No	30		
4/3/129	v) OD 15.88 mm	No	80		
4/3/130	vi) OD 12.70 mm	No			
4/3/131	Pipework fittings - reducers Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348	No	15		
4/3/132	i) 35-28 mm	No	20		
	ii) 28-22 mm	No	30		
	iii) 22-15mm	No	30		
	iv) 15-12mm	No	30		
Carried to Trade Summary					
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/133	Pipework fittings - bends i) OD 34.93 mm	No	10			
4/3/134	ii) OD 28.58 mm	No	20			
4/3/135	iii) OD 22.23 mm	No	40			
4/3/136	iv) OD 15.88 mm	No	35			
4/3/137	v) OD 12.70 mm	No	25			
4/3/138	Pipework fittings - couplings OD 34.93 mm OD 28.58 mm	No	24			
4/3/139	OD 22.23 mm	No	24			
4/3/140	OD 15.88 mm	No	20			
4/3/141	OD 12.70 mm	No	24			
4/3/142	Vacuum trap isolation valves OD 22.23mm	No	10			
4/3/143	Vacuum traps Vacuum traps	No	4			
4/3/144	Area Valve Service Unit Complete with valves,emergency inlet points,pressure switches, gauge and medical gas zone alarm.	No	2			
4/3/145	Pipework supports Open type, medium duty, trays 250mm wide for piped reticulation inclusive of tertiary supports and fixing on the provided unistrut members at 1200mm distances	No	180			
4/3/146	Terminal units Medical gas specific terminal units to BS EN 737, labelled, including guide end piece valve filter, fixed on to the provided bed head trunking and final termination of pipes to the terminal units. i) Oxygen	No	12			
4/3/147	ii) Vacuum	No	12			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/148	iii) Medical air (400 kPa)	No	1			
4/3/149	Single Mount, Double Articulated Arm Medical Service System	No	1			
4/3/150	Horizontal Bedhead service system c/w riser	No	12			
4/3/151	Isolation valves i) OD 53.98 mm	No	2			
4/3/152	ii) OD 41.28 mm	No	2			
4/3/153	iii) OD 34.93 mm	No	4			
4/3/154	v) OD 28.58mm	No	6			
4/3/155	vi) OD 22.23mm	No	2			
4/3/156	vii) OD 15.88mm	No	2			
4/3/157	Test and commission the piped gases installation for OPD Medical Gas Services.			Item		
4/3/158	GROUNDFLOOR: BLOCK A Supply, deliver, install test and commission complete piped gases installation for Theatres as detailed below. Pipework Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) OD 28.58 mm	m	50			
4/3/159	ii) OD 22.23 mm	m	50			
4/3/160	iii) OD 15.88 mm	m	128			
4/3/161	v) OD 12.70 mm	m	68			
4/3/162	Pipework fittings - tees Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) OD 28.58 mm	No	10			
4/3/163	ii) OD 22.23 mm	No	10			
4/3/164	iii) OD 15.88 mm	No	5			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3						
MEDICAL GAS INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						
R						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/3/165	v) OD 12.70 mm	No	15			
4/3/166	Pipework fittings - reducers Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) 28-22 mm	No	10			
4/3/167	ii) 22-15mm	No	14			
4/3/168	iii) 15-12mm	No	10			
4/3/169	Pipework fittings - bends i) OD 28.58 mm	No	10			
4/3/170	ii) OD 22.23 mm	No	15			
4/3/171	iii) OD 15.88 mm	No	10			
4/3/172	v) OD 12.70 mm	No	16			
4/3/173	Pipework fittings - couplings OD 28.58 mm	No	6			
4/3/174	OD 22.23 mm	No	20			
4/3/175	OD 15.88 mm	No	30			
4/3/176	OD 12.70 mm	No	35			
4/3/177	Vacuum trap isolation valves OD 22.23mm	No	4			
4/3/178	Vacuum traps Vacuum traps	No	2			
4/3/179	Area Valve Service Unit Complete with valves,emergency inlet points,pressure switches, gauge and medical gas zone alarm.	No	1			
4/3/180	Pipework supports Open type, medium duty, trays 250mm wide for piped reticulation inclusive of tertiary supports and fixing on the provided unistrut members at 1200mm distances	No	25			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/181	Terminal units Medical gas specific terminal units to BS EN 737, labelled, including guide end piece valve filter, fixed on to the provided bed head trunking and final termination of pipes to the terminal units. i) Oxygen	No	5			
4/3/182	ii) Vacuum	No	5			
4/3/183	Isolation valves i) OD 28.58mm	No	6			
4/3/184	iii) OD 22.23mm	No	10			
4/3/185	iii) OD 15.88mm	No	10			
4/3/186	Test and commission the piped gases installation for Medical Gas Services.			Item		
4/3/187	Test and commission the piped gases installation for Medical Gas Services.	No	5			
4/3/188	GROUND FLOOR: BLOCK D Supply, deliver, install test and commission complete piped gases installation for Theatres as detailed below. Pipework Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) OD 28.58 mm	m	90			
4/3/189	ii) OD 22.23 mm	m	50			
4/3/190	iii) OD 15.88 mm	m	160			
4/3/191	v) OD 12.70 mm	m	200			
4/3/192	Pipework fittings - tees Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) OD 28.58 mm	No	25			
4/3/193	ii) OD 22.23 mm	No	30			
4/3/194	iii) OD 15.88 mm	No	40			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/195	v) OD 12.70 mm	No	50			
4/3/196	Pipework fittings - reducers Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348 i) 28-22 mm	No	27			
4/3/197	ii) 22-15mm	No	39			
4/3/198	iii) 15-12mm	No	40			
4/3/199	Pipework fittings - bends i) OD 28.58 mm	No	20			
4/3/200	ii) OD 22.23 mm	No	15			
4/3/201	iii) OD 15.88 mm	No	14			
4/3/202	v) OD 12.70 mm	No	20			
4/3/203	Pipework fittings - couplings OD 28.58 mm	No	14			
4/3/204	OD 22.23 mm	No	20			
4/3/205	OD 15.88 mm	No	30			
4/3/206	OD 12.70 mm	No	35			
4/3/207	Vacuum trap isolation valves OD 22.23mm	No	4			
4/3/208	Vacuum traps Vacuum traps	No	2			
4/3/209	Area Valve Service Unit Complete with valves,emergency inlet points,pressure switches, gauge and medical gas zone alarm.	No	1			
4/3/210	Pipework supports Open type, medium duty, trays 250mm wide for piped reticulation inclusive of tertiary supports and fixing on the provided unistrut members at 1200mm distances	No	120			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

4/3/211	Terminal units Medical gas specific terminal units to BS EN 737, labelled, including guide end piece valve filter, fixed on to the provided bed head trunking and final termination of pipes to the terminal units. i) Oxygen	No	29			
4/3/212	ii) Vacuum	No	29			
4/3/213	iii) Meidcal Air (400kPa)	No	27			
4/3/214	Isolation valves i) OD 28.58mm	No	6			
4/3/215	iii) OD 22.23mm	No	10			
4/3/216	iii) OD 15.88mm	No	10			
4/3/217	Test and commission the piped gases installation for Medical Gas Services.			Item		
4/3/218	Horizontal Bedhead service system c/w riser	No	10			
4/3/219	Single Mount, Double Articulated Arm Medical Service System	No	7			
4/3/220	Floor Standing Pedestal with Rotary Table	No	4			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd						

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 4 MECHANICAL INSTALLATION Bill No. 3 MEDICAL GAS INSTALLATION <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	238	
Total Brought Forward from Page No.	239	
Total Brought Forward from Page No.	240	
Total Brought Forward from Page No.	241	
Total Brought Forward from Page No.	242	
Total Brought Forward from Page No.	243	
Total Brought Forward from Page No.	244	
Total Brought Forward from Page No.	245	
Total Brought Forward from Page No.	246	
Total Brought Forward from Page No.	247	
Total Brought Forward from Page No.	248	
Total Brought Forward from Page No.	249	
Total Brought Forward from Page No.	250	
Total Brought Forward from Page No.	251	
Total Brought Forward from Page No.	252	
Total Brought Forward from Page No.	253	
Carried Forward to Summary of Section No.		R
MECHANICAL INSTALLATION		
Bill No. 3		
MEDICAL GAS INSTALLATION		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>KITCHEN EQUIPMENT</u>			
	<u>FANS</u> <u>Supply, deliver, install and commission the following fans complete with wiring, fan controls, timer switch, anti-vibration mountings and wall/ceiling mounting kits as specified.</u>			
4/4/1	FAF-1 - 630mm dia. fan, duty @ 250Pa , 3595L/s air flow, 1440rpm max and complete with a speed controller, 2-off matching sound attenuators, electrical box, timer controller, filter medium	No	1	
4/4/2	EAF-1 630mm dia. fan, duty @ 250Pa , 4230L/s air flow, 1440rpm max and complete with a speed controller, 2-off matching sound attenuators, electrical box, timer controller	No	1	
	<u>LOW PRESSURE GALVANISED DUCTWORK</u>			
	<u>Rectangular galvanised sheet metal low pressure ducting and duct accessories complete, including hanger rods, fixing bolts, mild steel angle sections, flanges, necessary fixing material, etc, as per specification. (Insulation measured elsewhere)</u>			
	<u>FOR FAF & EAF</u>			
	<u>Flexible connection between fan sound attenuator and ducting including fasteners,</u>			
4/4/3	630mm Dia, 200mm long	No	4	
	<u>Un- insulated Ducting</u>			
4/4/4	Category 1	m ²	32	
4/4/5	Category 3	m ²	20	
	<u>KITCHEN EQUIPMENT</u>			
4/4/6	10-Pan Rational Combi Steamer on stand c/w water filter	No	1	
	Carried to Trade Summary			R
	MECHANICAL INSTALLATION Bill No. 4 KITCHEN EQUIPMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

4/4/7	6 Open Burner Gas Range with oven	No	2			
4/4/8	FTG-10 OR Similar approved Flat top grill	No	1			
4/4/9	DPF 2/20 OR Similar Approved Double deep fryer	No	1			
4/4/10	4700x1500mm Stainless Steel Kitchen Extraction Canopy	No	1			
4/4/11	1220x610 4 Tier Add On Shelf	No	1			
4/4/12	Black Refuse Bin On Dolly	No	1			
4/4/13	Wall mounted microwave	No	1			
4/4/14	1780x650 2.5 Door Polar OR Similar approved top u/Bar fridge	No	1			
4/4/15	1785x750 5 Div Bain Marie Hot Closet	No	1			
4/4/16	10 Litre Hydroboil	No	1			
4/4/17	S/S Double Bowl Pot Sink	No	2			
4/4/18	Dish Washing Machine	No	1			
<u>AIR TERMINALS</u>						
<u>Diffusers , Grilles and Jet Nozzles</u>						
4/4/19	10mm Diameter holes performed Supply Air Diffuser c/w plenum box with 300dia. Spigot connection and air filter media cut to size. Diffusers to c/w 1.5m flexible ducting	No	10			
Carried to Trade Summary						
MECHANICAL INSTALLATION Bill No. 4 KITCHEN EQUIPMENT <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>						

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

Bill No	Section No. 4 MECHANICAL INSTALLATION <u>SECTION SUMMARY - MECHANICAL INSTALLATION</u>	Page No	Amount R
4/1	HVAC INSTALLATION	226	
4/2	FIRE SERVICES	237	
4/3	MEDICAL GAS INSTALLATION	254	
4/4	KITCHEN EQUIPMENT	257	
	Carried to Final Summary		R
	MECHANICAL INSTALLATION <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.5</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>BILL NO.1</u></p> <p><u>DEMOLITIONS AND ALTERATIONS</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Demolitions and work on site:</u></p> <p>All demolitions and works on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with the work. The utmost care is to be observed to avoid any structural or other damages in the remaining portions of the existing building.</p> <p>Special care is to be exercised not to interfere with any electrical installation, and notice is to be given to the Representative/Agent when any disconnections, removal of wire, etc., are necessary and the Contractor is to afford every facility to the workmen carrying out his work.</p> <p align="center">Carried to Trade Summary</p> <p>DEMOLITIONS Bill No. 1 DEMOLITIONS AND ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R

The Contractor shall not remove or interfere with any furniture, fittings or similar articles unless specially mentioned in the following items and shall give adequate notice to the Representative/Agent if the removal of any such articles from parts of the buildings are to be altered becomes necessary so that the Employer may have same removed before the Contractor commences work in such parts.

The Contractor will be held solely responsible for any damage to persons and property and for the safety of the structures and must make good at his own expense any damage that may occur.

Damage and repairs to services:

Should the Contractor damage any services which are to remain in operation or any services which have not yet been disconnected prior to removal, then the Contractor will be held solely responsible for such damage and any further resultant damage.

The Contractor shall immediately notify the Representative/Agent and the Authorities concerned and he shall at his own cost make all necessary arrangements for disconnection and repairs with the relevant Authorities and shall pay all fees and charges levied.

Disposal of material:

All existing materials specified to be "removed", "demolished and removed", "hacked up or off and removed", or "taken down or off and removed" or "broken down and removed", etc., become the property of the Contractor. These materials and all debris, rubbish and earth material must be carted away by the Contractor and the site must be left clean and unencumbered. The contractor must make his own arrangements for dumping and shall pay all fees and charges levied.

Carried to Trade Summary

DEMOLITIONS

Bill No. 1

DEMOLITIONS AND ALTERATIONS

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

	If any of the bricks or other materials specified to be "removed" are sound and considered suitable for any portion of the new work they must be thoroughly cleaned off and stacked on site for inspection by the Representative/Agent. The approval of the Representative/Agent must be obtained before any such materials are re-used in the new work. All existing materials specified to be "taken down and set aside for re-use" or "taken down and set aside" shall remain the property of the Employer and must be cleaned off, cleared of all nails, etc., and neatly stacked and stored on site by the Contractor where directed and carefully handled during taking down, storage and re-fixing. The Contractor will be held responsible for the safety of these materials and must take all the necessary precautions for their protection and any damage or loss that may occur must be made good by the Contractor at his own expense.				
<u>DEMOLITIONS AND ALTERATIONS</u>					
<u>REMOVAL OF EXISTING WORK</u>					
<u>Demolition of existing covered structures, etc</u>					
5/1/1	Demolition of covered parking structure complete with uprooting concrete footings complete with carting away and backfilling to suitable ground conditions.	m ²	334		
5/1/2	Demolition of existing high rise water tower structure complete with uprooting concrete bases complete with carting away and backfilling to suitable ground conditions.	No	1.00		
<u>Taking out and removing pavers, etc</u>					
5/1/3	Paving of various thickness.	m ²	752		
5/1/4	Hack up and remove 20mm thick tarmacadam paving and 150mm thick base course under.	m ²	18 691		
5/1/5	Kerbs complete.	m	223		
<u>Carried to Trade Summary</u>					
DEMOLITIONS Bill No. 1 DEMOLITIONS AND ALTERATIONS DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					

Major Refurbishment and Additions to the existing Galeshewe Day Hospital in Kimberly

<u>Taking out/off and removing metalwork:</u>				
5/1/6	Security fence approximately 1800mm high complete with rames, spikes, etc, including rooting out intermediate posts, corner posts, etc.	m	422	
<u>BUDGETARY ALLOWANCES</u>				
<u>Additional demolitions and alteration works:</u>				
5/1/7	Budgetary Allowance of R 500 000.00 (five Hundred Thousand Rand) for additional demolition and alteration works.	Item		500 000.00
Carried to Trade Summary				
DEMOLITIONS				
Bill No. 1				
DEMOLITIONS AND ALTERATIONS				
DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 5 DEMOLITIONS Bill No. 1 DEMOLITIONS AND ALTERATIONS <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	259	
Total Brought Forward from Page No.	260	
Total Brought Forward from Page No.	261	
Total Brought Forward from Page No.	262	
Carried to Final Summary		R
DEMOLITIONS Bill No. 1 DEMOLITIONS AND ALTERATIONS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<u>SECTION NO.6</u>			
	<u>EXTERNAL WORKS</u>			
	<u>BILL NO.1</u>			
	<u>ROADS, PAVINGS, ETC.</u>			
	<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p><u>Carting away of excavated material:</u></p> <p>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.</p>			
	Carried to Trade Summary			
	EXTERNAL WORKS Bill No. 1 ROADS, PAVING, ETC. <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R

<p><u>Excavations, Filling , etc.:</u></p> <p>The Contractor shall notify the Principal Agent as soon as the excavations are ready to receive foundations and no building work may be started until the Principal Agent has approved the excavations.</p> <p>Over excavations taken beyond the levels and sizes shown or required to obtain a solid foundation shall be filled by the contractor, at his own expense, with 15MPa concrete.</p> <p>Should the Contractor consider that any of the excavations are more difficult in nature than excavations in "earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly.</p> <p>The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavations shall not determine the classification of the material excavated.</p>	<p><u>Testing:</u></p> <p>Prices for filling are to include for all necessary density tests in accordance with SANS 1200D.</p>	<p><u>Prescribed density tests:</u></p> <p>NOTE: The Contractor is specifically referred to the SANS 1200 clause regarding the number of density tests required on the layer work, filling, etc. The tests as prescribed are deemed to be included in the appropriate rates for the layer work, filling, etc. and will not be paid for separately. The following density tests measured are over and above those normally required by SANS 1200 and is for the use of the Engineer only and will only be paid for if instructed in writing and approved as acceptable by the Engineer.</p>	<p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Carried to Trade Summary</u></p> <p>EXTERNAL WORKS Bill No. 1 ROADS, PAVING, ETC. <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>
---	---	---	---

	<u>Sizes in descriptions.:</u> Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.				
<u>BULK EXCAVATION</u>					
<u>Open face excavation in earth over sloping site</u>					
6/1/1	Open face excavation.	m ³	11 682		
	<u>Extra over bulk excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk).:</u>				
6/1/2	Surplus material from excavations and/or stock piles on site to a dumping site to be found by the Contractor.	m ³	11 682		
	<u>Earth filling supplied by the contractor, temporarily stockpiled on site including haulage approximately 100m from perimeter of stock piles:</u>				
6/1/3	150mm Thick sub-base course of G7 material compacted to 95% MOD AASHTO density in 150mm thick layers, under floors and pavings, etc.	m ³	2 292		
6/1/4	150mm Thick sub-base course of G6 material compacted to 98% MOD AASHTO density in 150mm thick layers, under floors and pavings, etc.	m ³	1 986		
6/1/5	150mm Thick sub-base course of G5 material compacted to 95% MOD AASHTO density in 150mm thick layers, under floors and pavings, etc.	m ³	1 213		
6/1/6	150mm Thick sub-base course of C4 material compacted to 95% MOD AASHTO density in 150mm thick layers, under floors and pavings, etc.	m ³	3 199		
	<u>Coarse river sand filling compacted to 98% Mod. AASHTO maximum density:</u>				
6/1/7	Under floors, etc.	m ³	515		
	Carried to Trade Summary				
EXTERNAL WORKS					
Bill No. 1					
ROADS, PAVING, ETC.					
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					
				R	

6/1/8	<u>Keeping excavations free of water:</u> Keeping excavations free of water other than subterranean water.		Item		
6/1/9	<u>Prescribed density tests on filling:</u> "Modified AASHTO Density" test.	No	1 558		
6/1/10	<u>Compaction of surfaces:</u> Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.	m ²	23 364		
	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
6/1/11	<u>Excavation in all materials other than rock not exceeding 2m deep:</u> Trenches.	m ³	1		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
6/1/12	<u>25 Mpa/19mm Concrete:</u> Edge beams.	m ³	1		
	<u>SOIL POISONING</u>				
	<u>Approved brand of weed killer mixed and applied in accordance with manufacturer's instruction:</u>				
6/1/13	 <u>Under floors and pavings, etc. (Provisional).</u>	m ²	23 364		
	<u>ROADWORK, PARKING AREAS AND PAVING</u>				
	Carried to Trade Summary				
	EXTERNAL WORKS Bill No. 1 ROADS, PAVING, ETC. <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

	<u>Paving of 60mm interlocking paving bricks with butt joints on 20mm thick river sand bed with sand and cement mixture swept into joints and hosed down including preparation of ground or filling:</u>				
6/1/14	60mm Paving laid in herringbone pattern to walkways, etc to falls.	m ²	1 598		
	<u>Paving of 80mm interlocking paving bricks with butt joints on 20mm thick river sand bed with sand and cement mixture swept into joints and hosed down including preparation of ground or filling:</u>				
6/1/15	80mm Paving laid in herringbone pattern to walkways, etc to falls.	m ²	6 488		
	<u>Pre cast concrete kerbing finished smooth on exposed surfaces including building in, bedding, jointing, pointing, concrete haunching, excavation, backfilling, ramming, etc. complete as indicated:</u>				
6/1/16	Barrier kerb (Figure 8C) overall size 300 x 125mm high.	m	89		
6/1/17	Barrier kerb (Figure 8C) overall size 300 x 125mm high circular on plan.	m	3		
6/1/18	Barrier kerb (Figure 3) overall size 150 x 300mm high.	m	2 600		
6/1/19	Barrier kerb (Figure 3) overall size 150 x 300mm high circular on plan.	m	221		
	<u>60/70 Penetration grade bituminous premix road surfacing:</u>				
6/1/20	30mm Thick continuous medium graded asphalt to roadways, etc	m ²	15 278		
	<u>Road Signs</u>				
6/1/21	Standard "STOP" sign with standard 50mm diameter galvanised mild steel fixing post bedded into and including bases, including any necessary excavation, mass concrete, etc.	No	5		
	<u>PAINTWORK, ETC. TO NEW WORK</u>				
	<u>Carried to Trade Summary</u>				
	EXTERNAL WORKS Bill No. 1 ROADS, PAVING, ETC. <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			R	

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Prepare surfaces, wash thoroughly, remove loose material, leave to dry and apply two coats SABS approved water borne acrylic road marking paint:</u>				
6/1/22	Markings on paving surfaces, 100mm wide.	m	1 647		
6/1/23	Island markings on road surfaces, 100mm wide.	m	104		
6/1/24	Pedestrian markings on road surfaces, 500mm wide.	m	59		
6/1/25	Disabled parking sign in 1000 x 1000mm surround.	No	241		
	<u>prime coats bitumen emulsion base:</u>				
6/1/26	On roads.	m ²	15 278		
	Carried to Trade Summary			R	
EXTERNAL WORKS					
Bill No. 1					
ROADS, PAVING, ETC.					
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 6 EXTERNAL WORKS Bill No. 1 ROADS, PAVING, ETC. <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	264	
Total Brought Forward from Page No.	265	
Total Brought Forward from Page No.	266	
Total Brought Forward from Page No.	267	
Total Brought Forward from Page No.	268	
Total Brought Forward from Page No.	269	
Carried Forward to Summary of Section No.		R
EXTERNAL WORKS		
Bill No. 1		
ROADS, PAVING, ETC.		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.6</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>BILL NO.2</u></p> <p><u>STORMWATER DRAINAGE</u></p> <p>The Contractor is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and to the Supplementary Preambles which are incorporated in this Bill.</p> <p><u>Carting away of excavated material:</u></p> <p>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.</p> <p align="right">Carried to Trade Summary</p> <p>EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

Excavations, Filling , etc.:

The Contractor shall notify the Principal Agent as soon as the excavations are ready to receive foundations and no building work may be started until the Principal Agent has approved the excavations.

Over excavations taken beyond the levels and sizes shown or required to obtain a solid foundation shall be filled by the contractor, at his own expense, with 15MPa concrete.

Should the Contractor consider that any of the excavations are more difficult in nature than excavations in "earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly.

The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavations shall not determine the classification of the material excavated.

Testing:

Prices for filling are to include for all necessary density tests in accordance with SANS 1200D.

Prescribed density tests:

NOTE: The Contractor is specifically referred to the SANS 1200 clause regarding the number of density tests required on the layer work, filling, etc. The tests as prescribed are deemed to be included in the appropriate rates for the layer work, filling, etc. and will not be paid for separately. The following density tests measured are over and above those normally required by SANS 1200 and is for the use of the Engineer only and will only be paid for if instructed in writing and approved as acceptable by the Engineer.

Carried to Trade Summary

EXTERNAL WORKS

Bill No. 2

STORMWATER DRAINAGE

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

R

	<u>SITE CLEARANCE, ETC</u>				
6/2/1	<u>Site clearance, etc.:</u> Stripping average 200mm thick layer of top soil and stockpiling on site.	m ²	703		
	<u>EXCAVATION OTHER THAN BULK</u>				
	<u>Excavation in all materials other than rock not exceeding 2m deep:</u>				
6/2/2	Reduced levels under floors, pavings, channels, etc.	m ³	86		
6/2/3	Trenches.	m ³	70		
	<u>Risk of collapse of excavations other than bulk:</u>				
6/2/4	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	736		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
6/2/5	Off site to a dumping site to be found by the Contractor.	m ³	157		
	<u>Earth filling supplied by the contractor, temporarily stockpiled on site including haulage approximately 100m from perimeter of stock piles:</u>				
6/2/6	150mm Thick sub-base course of G7 material compacted to 98% MOD AASHTO density in 150mm thick layers, under floors and channels, etc.	m ³	9		
6/2/7	150mm Thick sub-base course of G5 material compacted to 98% MOD AASHTO density in 150mm thick layers, under floors and channels, etc.	m ³	9		
	<u>Coarse river sand filling compacted to 98% Mod. AASHTO maximum density:</u>				
6/2/8	Under floors, etc.	m ³	9		
	Carried to Trade Summary				R
	EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

6/2/9	<u>Keeping excavations free of water:</u> Keeping excavations free of all water other than subterranean water.			Item		
6/2/10	<u>Prescribed density tests on filling:</u> Modified AASHTO Density test.	No	38			
6/2/11	<u>Compaction of surfaces:</u> Rip and scarify top surface of existing formation to a depth of 150mm and compact to not less than 100% of Modified AASHTO density.	m ²	703			
6/2/12	<u>SOIL POISONING.</u> <u>Approved brand of weed killer mixed and applied in accordance with manufacturer's instruction:</u> Under floors, pavings, etc. (Provisional).	m ²	893			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u> <u>REINFORCED CONCRETE</u> <u>25 Mpa/19mm Concrete:</u> 600mm Wide V-Drains cast in panels to falls.	m ³	6			
6/2/13	300mm Wide channel cast in panels to falls.	m ³	345			
6/2/14	1000mm Wide rectangular channel cast in panels to falls.	m ³	40			
6/2/15	<u>Test blocks:</u> Making and testing sets of three 150 x 150 x 150 mm concrete strength test cubes (Provisional).	Sets	48			
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>					
	Carried to Trade Summary					
	EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				R	

6/2/17	<u>Smooth Formwork to Sides:</u> Edges, risers, ends, and reveals not exceeding 300mm high.		m	2 264		
6/2/18	<u>FINISHING TOP SURFACE OF CONCRETE</u> <u>Finishing top surfaces of concrete smooth with a steel trowel:</u> Aprons, stormwater channels, soak-away slabs, etc.		m ²	807		
6/2/19	<u>MOVEMENT JOINTS ETC.</u> <u>Polyurethane or equal and approved joint forming material in movement joint:</u> 10mm Joints between concrete surfaces not exceeding 300mm wide.		m	195		
6/2/20	<u>REINFORCEMENT (PROVISIONAL)</u> <u>Fabric reinforcement:</u> Type 193 fabric reinforcement in concrete aprons, channels, soak-away slabs, etc.		m ²	703		
6/2/21	<u>WATERPROOFING</u> <u>JOINT SEALANTS ETC</u> <u>Two part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc including raking out expansion joint filler if necessary:</u> Under aprons, channels, etc.		m ²	576		
6/2/22	<u>Carried to Trade Summary</u> EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd		m	195	R	

	<u>METALWORKS</u>					
6/2/23	<u>Galvanised welded steel drainage grate.:</u> 450mm Wide steel stormwater drainage inlet with frame.	m ²	78			
6/2/24	<u>STORMWATER DRAINAGE</u> <u>Class 100D concrete pipes with interlocking joints:</u> 600mm Pipes laid in and including trenches exceeding 1m not exceeding 2m deep including backfilling.	m	1 001			
6/2/25	<u>Extra over class 100D concrete pipe for fittings:</u> Catchpit 1925 x 2067mm and exceeding 1000mm not exceeding 1500mm deep internally, complete with one brickwall with rebate opening for cover and frame including 996 x 517mm angle iron frame with 988 x 495mm precast catchpit slab , concrete benching and reinforcement in bottom.	No	51			
6/2/26	<u>Gratings, covers, etc.:</u> 600 x 600mm Stormwater grid inlet with frame.	No	51			
	Carried to Trade Summary			R		
	EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 6 EXTERNAL WORKS Bill No. 2 STORMWATER DRAINAGE <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	271	
Total Brought Forward from Page No.	272	
Total Brought Forward from Page No.	273	
Total Brought Forward from Page No.	274	
Total Brought Forward from Page No.	275	
Total Brought Forward from Page No.	276	
Carried Forward to Summary of Section No.		R
EXTERNAL WORKS		
Bill No. 2		
STORMWATER DRAINAGE		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO. 6</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>BILL NO.3</u></p> <p><u>BULK WATER SUPPLY</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings:</u> Soil, waste and vent pipes and fittings shall be solvent weld jointed.</p> <p><u>Fixing of pipes:</u> Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level.</p> <p align="center">Carried to Trade Summary</p> <p>EXTERNAL WORKS Bill No. 3 BULK WATER SUPPLY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R

	<u>Reducing fittings:</u> Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm 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. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.			
	<u>Excavations:</u> No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling. 'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.			
	<u>Laying, backfilling, bedding, etc of pipes.:</u> Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions. Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD			
	<u>WATER SUPPLIES (DOMESTIC AND FIRE)</u>			
	<u>Class PN16 uPVC pipes:</u> 6/3/1 160mm Pipes laid in and including trenches exceeding 1000mm not exceeding 1500m deep and backfill.	m	940	
	<u>Class 9 uPVC pipes:</u> 6/3/2 110mm Pipes laid in and including trenches exceeding 1000mm not exceeding 1500mm deep and backfill with imported material.	m	2 179	
	Carried to Trade Summary			R
	EXTERNAL WORKS Bill No. 3 BULK WATER SUPPLY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>Extra over class PN16 uPVC pipes for fittings:</u>				
6/3/3	160mm bend.	No	12		
6/3/4	160mm Equal tee.	No	10		
	<u>Extra over class Class 9 uPVC pipes for fittings:</u>				
6/3/5	110mm bends.	No	129		
6/3/6	110mm Equal tee junction.	No	13		
6/3/7	110mm End cap.	No	2		
	<u>Sundries:</u>				
6/3/8	Water meter inspection chamber measuring approximately 820 x 820mm on plan complete with concrete surface bed, brick chamber below not exceeding 1000mm deep internally and 600 x 600mm square manhole cover including frame, 50mm HDPE drainage pipe with 19mm stone, etc.	No	1		
6/3/9	Pre-cast concrete valve inspection chamber size 750mm internal diameter exceeding 1000mm but not exceeding 1500mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	15		
6/3/10	"Meinecke Cosmos WPD" or similar and approved water meter to the engineer's specifications	No	1		
6/3/11	110mm RSV gate valve.	No	15		
6/3/12	500 x 500 x 600mm Unreinforced concrete thrust blocks in trenches at bends, tees, etc. including extra excavation, formwork, etc (Provisional).	No	164		
	<u>Municipal connection:</u>				
6/3/13	Municipal connection.	Item			
	Carried to Trade Summary			R	
	EXTERNAL WORKS Bill No. 3 BULK WATER SUPPLY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>Testing:</u> 6/3/14 Testing water pipe system.		Item			
	<u>FIRE APPLIANCES ETC</u>					
	<u>Fire hydrants:</u>					
6/3/15	160mm Diameter PN16 uPVC vertical cast in 25MPA concrete.	m	14			
6/3/16	80 x 65mm Brass double lug tamper proof hydrant valve with cap and chain.	No	9			
6/3/17	Reducing socket suitable for 160mm diameter PN16 uPVC pipe.	No	9			
6/3/18	160mm Diameter PN16 uPVC tee.	No	9			
6/3/19	65mm Diameter Male quick delivery hose.	No	9			
	<u>Fire hydrant pedestals.:</u>					
6/3/20	Unreinforced concrete hydrant pedestal 1300mm high, cast around vertical pipe with bottom 800mm below ground, 616 x 616mm square at base and tapering to 190 x 190mm overall octagonal shaped top, including mass concrete base, excavation, formwork and two coats of pva paint to exposed surfaces.	No	9			
	Carried to Trade Summary			R		
	EXTERNAL WORKS Bill No. 3 BULK WATER SUPPLY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 6 EXTERNAL WORKS Bill No. 3 BULK WATER SUPPLY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	278	
Total Brought Forward from Page No.	279	
Total Brought Forward from Page No.	280	
Total Brought Forward from Page No.	281	
Carried Forward to Summary of Section No.		R
EXTERNAL WORKS		
Bill No. 3		
BULK WATER SUPPLY		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.6</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>BILL NO.4</u></p> <p><u>SOIL DRAINAGE</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings:</u> Soil, waste and vent pipes and fittings shall be solvent weld jointed.</p> <p><u>Fixing of pipes:</u> Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level.</p> <p align="center">Carried to Trade Summary</p> <p>EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R

	<p><u>Reducing fittings:</u></p> <p>Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm 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. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.</p> <p><u>Excavations:</u></p> <p>No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.</p> <p>'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.</p> <p><u>Laying, backfilling, bedding, etc of pipes:</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: : Sewers LE shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SAB.</p>														
	<p><u>SOIL DRAINAGE</u></p> <p><u>Class 34 uPVC pipes:</u></p> <table> <tr> <td>6/4/1</td> <td>160mm Pipes laid in and including trenches not exceeding 1m deep including backfilling.</td> <td>m</td> <td>28</td> </tr> <tr> <td>6/4/2</td> <td>160mm Pipes laid in and including trenches exceeding 1.5 not exceeding 2m deep including backfilling.</td> <td>m</td> <td>619</td> </tr> <tr> <td>6/4/3</td> <td>160mm Pipes laid in and including trenches exceeding 2 not exceeding 2.5m deep including backfilling.</td> <td>m</td> <td>502</td> </tr> </table>	6/4/1	160mm Pipes laid in and including trenches not exceeding 1m deep including backfilling.	m	28	6/4/2	160mm Pipes laid in and including trenches exceeding 1.5 not exceeding 2m deep including backfilling.	m	619	6/4/3	160mm Pipes laid in and including trenches exceeding 2 not exceeding 2.5m deep including backfilling.	m	502		
6/4/1	160mm Pipes laid in and including trenches not exceeding 1m deep including backfilling.	m	28												
6/4/2	160mm Pipes laid in and including trenches exceeding 1.5 not exceeding 2m deep including backfilling.	m	619												
6/4/3	160mm Pipes laid in and including trenches exceeding 2 not exceeding 2.5m deep including backfilling.	m	502												
<p align="center">Carried to Trade Summary</p> <p>EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R												

	<u>Sumps, catchpits, inspection chambers, etc (gratings and covers elsewhere):</u>				
6/4/4	Pre-cast concrete inspection chamber size 1000mm internal diameter exceeding 1000mm but not exceeding 1500mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	1		
6/4/5	Pre-cast concrete inspection chamber size 1000mm internal diameter exceeding 1500mm but not exceeding 2000mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	29		
6/4/6	Pre-cast concrete inspection chamber size 1000mm internal diameter exceeding 2000mm but not exceeding 2500mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	18		
6/4/7	Pre-cast concrete inspection chamber size 1000mm internal diameter exceeding 2500mm but not exceeding 3000mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	10		
6/4/8	Pre-cast concrete inspection chamber size 1000mm internal diameter exceeding 3000mm but not exceeding 3500mm deep internally, complete with 150mm thick pre-cast concrete cover slab with rebated opening for cover and frame, benching in bottom chamber and dished down to channels.	No	4		
	<u>Covers, etc.:</u>				
6/4/9	740mm Diameter 204kg cast iron manhole cover and frame.	No	62		
6/4/10	Lifting key for manhole cover (To be handed over to employer upon completion).	No	20		
Carried to Trade Summary					R
EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

6/4/11	<u>Pipe connections:</u> Excavate to expose and break into side of existing manhole, break through side into manhole for new 160mm uPVC pipe connection, including changing benching, etc to accommodate new connection.	No	1		
	<u>Sundries:</u> Testing soil drainage system.			Item	
6/4/12					
Carried to Trade Summary					
EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd					
R					

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 6 EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	283	
Total Brought Forward from Page No.	284	
Total Brought Forward from Page No.	285	
Total Brought Forward from Page No.	286	
Carried Forward to Summary of Section No.		R
EXTERNAL WORKS		
Bill No. 4		
SOIL DRAINAGE		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Bill No	Section No. 6 EXTERNAL WORKS <u>SECTION SUMMARY - EXTERNAL WORKS</u>	Page No	Amount R
6/1	ROADS, PAVING, ETC.	270	
6/2	STORMWATER DRAINAGE	277	
6/3	BULK WATER SUPPLY	282	
6/4	SOIL DRAINAGE	287	
	Carried to Final Summary		R
	EXTERNAL WORKS		
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<p><u>SECTION NO.7</u></p> <p><u>FENCING AND RAILING</u></p> <p><u>BILL NO.1</u></p> <p><u>METALWORK</u></p> <p><u>PREAMBLES</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>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES:</u></p> <p><u>Descriptions:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p>Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.</p> <p style="text-align: right;">Carried to Trade Summary</p> <p>BOUNDARY, RETAINING, ETC. Bill No. 1 FENCING AND RAILING DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>			R

<p><u>General notes.:</u></p> <p>A. All steel materials shall be of good commercial quality factory powder coated steel.</p> <p>B. All pipes shall be factory powder coated, one piece without joints. Furnish moisture proof caps for all posts.</p> <p>C. Zinc coating shall be smooth and essentially free from lumps, globs, or points.</p> <p>D. The fence configuration should not have any sharp corners and all angles at changes of direction should be a minimum of 130 degrees.</p> <p>E. All connections and joints for gates shall be welded to form rigid frames or assemblies with corner fittings.</p> <p>F. Gate hinges shall not twist or turn under the action of the gate. They shall be so arranged that a closed gate cannot be lifted off the hinges to gain entry.</p> <p>G. All fittings, brackets and rear wheel tracks for sliding gates shall be standard manufactured products for the intended application.</p> <p>H. Miscellaneous material shall be galvanized.</p>				
Carried to Trade Summary			R	

BOUNDARY, RETAINING, ETC.

Bill No. 1

FENCING AND RAILING

DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd

	<u>Invisible or similar and approved Security Fencing System.:</u>				
7/1/1	<p>Supply and install fencing comprising of steel mesh panels size 3305 x 1800mm high formed of 3mm diameter hot dipped powder coated wire with aperture size (centres) 76.2mm x 12.7mm. Panels to be reinforced with 4 x 50mm deep "V" formation horizontal recessed bands with 2 x 70 degree flanges along sides (Internal fixtures - all fixtures shall be on the inside of fence line) and 2 x 30 degree along top and toe (Integrated rigid angle). Panel posts shall have a flush panel post finish with no climbing aid. All panels shall be affixed to post over 48 line wire using 16 no. Single bolt comb clamps and 16 no. Tech bolts.</p> <p>Panel posts shall be 2mm thick x 2.4m long taper locking type, size 85mm wide tapering to 45mm with a depth of 85mm. Posts to include locking recess mechanism to secure panel edges and top end sealed with a UV stabilized polymer cap. All post bottom ends to be welded onto 150 x 150 x 3mm thick base plate cast into 400 x 400 x 600mm deep 15Mpa concrete base including necessary excavations, cartaway, etc</p> <p>Fence and posts to be installed according to manufacturer's instructions and specifications.</p>	m	511		
7/1/2	<p>Manual sliding gate, size 6000 x 1800mm high fitted with similar and equal to the fence ant-climb on top structures and ant-burrow at the bottom structures, including hinges, locks, barrel bolts, and all accessories complete as per manufacturer's instructions.</p>	No	2		
	Carried to Trade Summary		R		
	BOUNDARY, RETAINING, ETC. Bill No. 1 FENCING AND RAILING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

	<u>Invisible or similar and approved Security Pedestrian Gates.:</u>			
7/1/3	Single manual swing pedestrian gate, size 1000 x 1800mm high fitted with similar and equal to the fence ant-climb on top structures and ant-burrow at the bottom structures, including hinges, locks, barrel bolts, and all accessories complete as per manufacturer's instructions.	No	2	
7/1/4	100mm Wide x 1650mm long spikes including all accessories complete as per manufacturer's instructions.	No	310	
	Carried to Trade Summary			
	BOUNDARY, RETAINING, ETC. Bill No. 1 FENCING AND RAILING <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		R	

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 7 BOUNDARY, RETAINING, ETC. Bill No. 1 FENCING AND RAILING <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	289	
Total Brought Forward from Page No.	290	
Total Brought Forward from Page No.	291	
Total Brought Forward from Page No.	292	
Carried to Final Summary		R
BOUNDARY, RETAINING, ETC.		
Bill No. 1		
FENCING AND RAILING		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No	Quantity	Rate	Amount R
<u>SECTION NO.8</u>			
<u>BILL NO. 2</u>			
<u>OCCUPATIONAL HEALTH AND SAFETY</u>			
<u>MODEL PREAMBLES</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>			
<p align="center">Carried to Trade Summary</p> <p>OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</p>	R		

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<p>Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles.</p> <p>The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications.</p> <p>Prior to pricing the principal contractor must familiarize him/herself with the Occupational Health and Safety Act No. 85 Of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety specifications.</p> <p>The items in this Bill do not contain quantities hence the Contractor must insert his own quantities based on his individual requirements to comply with the Health and Safety obligations and demands of the Occupational Health and Safety Act No. 85 of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety Specifications.</p> <p>The costs included herein must incorporate Community Liaison Officer (CLO).</p>			
	<u>1.1 Preparation and submission of Health and Safety Plan.</u>			
8/1/1	The preparation and submission of the Safety and Health Plan which must be based on the issued Health and Safety Specifications.		SUM	
	<u>1.2 Preparation and submission of the Health and Safety File</u>			
8/1/2	The preparation and submission of the Health and Safety File that contains all the required documentation as would be necessary for the proper administration of OHS on site.		SUM	
	Carried to Trade Summary		R	
	OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd			

	<u>1.3 OHS Management System</u> Monitoring, review and maintenance of Occupational Safety and Health management system as and when required.				
8/1/3	<u>1.4 The Safety and Health Committee.</u> Conduct OHS meetings and inspections during the duration of the contract as below;			SUM	
8/1/4	a) Health and Safety committee meetings held monthly for the duration of the contract.	No	24.00		
8/1/5	b) Site Safety and Health inspection for the workplace (once in every four months) for the duration of the contract.	No	6.00		
	<u>1.6 Appointment of Health and Safety Officer</u> Full time competent Health and Safety Officer for the entire duration of the contract.			SUM	
	<u>1.7 Training of Health and Safety Representatives</u> Training of two Health and Safety Representatives to enable proper execution of responsibilities in terms of Section 17 of the Act.			SUM	
	<u>1.8 Medical Check Up</u> Conduct health fitness by a registered medical practitioner at least on yearly basis to ensure their operator/workers are in good health before and during their engagement in the period of contract.			SUM	
	<u>1.9 Personal Protective Equipment</u> Provide, maintain and replace any damage personal protective equipment as per specification to all employees.			SUM	
	<u>1.10 Health and Safety Training</u>				
	Carried to Trade Summary			R	
	OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd				

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>Plan and conduct relevant safety and health training plan as per site requirement.</u>				
8/1/10	Fire Fighting Training	No	6.00		
8/1/11	Fall Protection Planner	No	6.00		
8/1/12	Scaffold Erectors	No	6.00		
8/1/13	Scaffold Inspector	No	6.00		
8/1/14	Scaffold Supervisor	No	6.00		
8/1/15	Scaffold Team Leader	No	6.00		
	<u>1.11 Hazards Identification Risk Assessment And Risk Control (HIRARC)</u>				
8/1/16	Prepare and undertake Hazards Identification, Risk Assessment and Risk controls (HIRARC) for all construction activities.			SUM	
	<u>1.12 Monthly Report</u>			SUM	
8/1/17	Printing/copying, papers, inks, binding or related cost in providing the monthly report within the contract period inclusive of any investigation expertise.			SUM	
	<u>1.13 Notification of Accidents, Dangerous Occurrences, Occupational Diseases</u>				
8/1/18	Provision for Accident / Incident Investigation Report inclusive for the cost to engage if there is any third parties involve (competent person / specialist) to investigate any accident at workplace.			SUM	
	<u>1.14 General Signage</u>				
	Safety signage at workplace to ensure the workers and the public are aware about safety within the contract period.				
	<u>Carried to Trade Summary</u>			R	
	OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

	<u>Provide, install and maintain the following approved signage</u>			
8/1/19	Construction Signboard indicating mandatory PPE to be worn on site.		SUM	
8/1/20	Signs indicating what to do and where to report with directional signs		SUM	
8/1/21	Emergency exit routes and assembly point.		SUM	
8/1/22	Any other safety signs as instructed and approved by the S.O.		SUM	
8/1/23	"No unauthorised entry" signage around site perimeter.		SUM	
	<u>1.16 First Aid Facilities.</u>			
	<u>Provision of complete set of first aid kit for office and quarters within the period of contract. Minimum requirement to be at site are two competent / trained First Aider and two complete first aid kits.</u>			
8/1/24	a) To provide suitable two (2) trained person to attend first-aid treatment.	No	6.00	
8/1/25	b) To provide and maintain first aid kit.	No	2.00	
	<u>1.17 Portable Fire Extinguisher.</u>			
	<u>Provide enough fire extinguishers at the workplace. The locations of the fire extinguishers include the site office, quarters and standby for any hot works activities within the contract period.</u>			
8/1/26	Provision and maintenance of approved fire extinguishers complete with relevant approved signage.		SUM	
	<u>Part 2 Amenities and Facilities (Construction Site and Site Accommodation)</u>			
	Carried to Trade Summary			
	OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd		R	

8/1/27	<p><u>2.1 Toilets</u></p> <p>Provide, maintain and the dislodging of toilets for workers. Toilet shall be connected to a sewer / temporary septic tank with the approval of the relevant competent authority. Contractor shall estimate the number of workers for entire project and at least 1 toilet per every 25 workers. For every 100 workers, there should be 4 numbers of toilet.</p>		SUM	
8/1/28	<p><u>2.2 Temporary structures and sanitary conveniences at construction sites</u></p> <p>Temporary site office with adequate lighting and ventilation.</p>		SUM	
8/1/29	<p>Sanitary facilities in the ratio of 1 water closet, 1 shower and 1 wash basin for every 25 workers or less shall be provided. The toilet facilities shall be connected to a sewer/temporary septic tank.</p>		SUM	
8/1/30	<p><u>2.3 Temporary rest area</u></p> <p>Provide and maintain rest area for the workers and site staff with safe area, ventilated and lighted.</p>		SUM	
8/1/31	<p><u>2.4 Lighting</u></p> <p>Provide adequate lighting in dark environment at work areas, access and egress.</p>		SUM	
	<u>Part 3 Fall Prevention</u>			
	<p><u>3.2 Safety nets</u></p> <p>Install and maintain safety net as close as possible to the working level. Should it be on the outside of the structure, the outer edges should be higher than the inner edge. Contractor to calculate the area to be close/cover base on the proposed design of the building.</p>		SUM	
	Carried to Trade Summary		R	
	OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 8 OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	294	
Total Brought Forward from Page No.	295	
Total Brought Forward from Page No.	296	
Total Brought Forward from Page No.	297	
Total Brought Forward from Page No.	298	
Total Brought Forward from Page No.	299	
Carried to Final Summary		R
OCCUPATIONAL HEALTH AND SAFETY Bill No. 1 OCCUPATIONAL HEALTH AND SAFETY <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Item No		Quantity	Rate	Amount R
	<p><u>SECTION NO.9</u></p> <p><u>BILL NO.1</u></p> <p><u>PROVISIONAL SUMS ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Work executed by direct contractors</u></p> <p>Work listed under the heading "DIRECT CONTRACTORS WORK" will commence during the execution of this contract and the contractor shall allow free access to the site for these direct contractors. The contractor shall prepare a programme in conjunction with these direct contractors in order to complete the work successfully. The direct contractors will be regarded as nominated sub-contractors but payment will not be made to them via the contractor. The estimated values of these contracts are listed to enable the contractor to determine profit and attendances, if required</p> <p><u>General</u></p> <p>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</p> <p>All prime cost amounts and provisional sums are net and include for delivery to site of all articles concerned</p> <p><u>Preliminaries</u></p> <p>The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"</p> <p>PROVISIONAL ITEMS TO BE DESCRIBED</p> <p><u>SPECIALIST WORK (SELECTED SUB-CONTRACTORS)</u></p> <p style="text-align: center;">Carried to Trade Summary</p> <p>PROVISIONAL SUMS Bill No. 1 PROVISIONAL AMOUNTS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i></p>			R

	<u>JOINERY FITTINGS</u>			
9/1/1	<u>Supply and installation of fixed joinery fittings:</u> Provide the amount of R4,500,000.00 (Four Million Five Hundred Thousand Rands) for fixed joinery fittings complete.	Item		4 500 000.00
9/1/2	Profit on above item.	Item		
9/1/3	Attendance on Ditto.	Item		
	<u>HULABOND/LUXALON CLADDING</u>			
9/1/4	Provide the sum of R600,000.00 (Six Hundred Thousand Rand) for Hulabond/Luxalon Cladding supplied and fixed complete.	Item		600 000.00
9/1/5	Allow for general attendance on ditto.	Item		
9/1/6	Allow for profit if required.	Item		
	<u>BALUSTRADING</u>			
9/1/7	Provide the sum of R80,000.00 (Eighty Thousand Rand) for Balustrading supplied and fixed complete.	Item		80 000.00
9/1/8	Allow for general attendance on ditto.	Item		
9/1/9	Allow for profit if required.	Item		
	<u>SIGNAGE</u>			
	<u>Supply and installation of Building Signage</u>			
9/1/10	Provide the amount of R245,000.00 (Two Hundred Forty Five Thousand Rands) for Building signage.	Item		245 000.00
9/1/11	Profit on above item.	Item		
9/1/12	Attendance on Ditto.	Item		
	Carried to Trade Summary		R	
	PROVISIONAL SUMS			
	Bill No. 1			
	PROVISIONAL AMOUNTS			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>ARTWORK, FEATURES, THEMING</u>			
9/1/13	Provide the sum of R200,000.00 (Two Hundred Thousand Rand) for Art Work/Features/Theming supplied and installed complete.	Item		200 000.00
9/1/14	Allow for general attendance on ditto.	Item		
9/1/15	Allow for profit if required.	Item		
	<u>WALL PANEL HEATERS</u>			
	<u>Supply and installation of Wall Panel Heaters:</u>			
9/1/16	Provide the amount of R150,000.00 (One Hundred Fifty Thousand Rands) for the supply and installation of a Wall Panel.	Item		150 000.00
9/1/17	Profit on above item.	Item		
9/1/18	Attendance on Ditto.	Item		
	<u>BURGLAR PROOFING</u>			
	<u>Supply and installation of a Burglar Proofing:</u>			
9/1/19	Provide the amount of R200,000.00 (Two Hundred Thousand Rands) for the supply and installation of Burglar Proofing.	Item		200 000.00
9/1/20	Profit on above item.	Item		
9/1/21	Attendance on Ditto.	Item		
	<u>SURVEYING</u>			
	<u>Surveying for External Works Execution</u>			
9/1/22	Provide the amount of R370,000.00 (Seventy Thousand Rands) for the provision of Surveying Services	Item		370 000.00
9/1/23	Profit on above item.	Item		
9/1/24	Attendance on Ditto.	Item		
	Carried to Trade Summary			R
	PROVISIONAL SUMS			
	Bill No. 1			
	PROVISIONAL AMOUNTS			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>LANDSCAPING</u>			
9/1/25	Provide the sum of R700,000.00 (Seven Hundred Thousand Rands) for the provision of Landscaping to be used as directed by the Principal Agent and deducted in whole or in part if not required.	Item		700 000.00
9/1/26	Profit on above item.	Item		
9/1/27	Attendance on Ditto.	Item		
	<u>SHADE CARPORTS</u>			
9/1/28	Provide the sum of R450,000.00 (Four Hundred Fifty Thousand Rand) for Shade Carports supplied and installed complete.	Item		450 000.00
9/1/29	Allow for general attendance on ditto.	Item		
9/1/30	Allow for profit if required.	Item		
	<u>LOCKERS</u>			
9/1/31	Provide the sum of R80,000.00 (Eighty Thousand Rand) for Lockers supplied and fixed complete.	Item		80 000.00
9/1/32	Allow for general attendance on ditto.	Item		
9/1/33	Allow for profit if required.	Item		
	<u>VERTICAL BLINDS</u>			
	<u>Supply and installation of venetian blinds:</u>			
9/1/34	Provide the amount of R450,000.00 (Four Hundred Fifty Thousand Rands) for supply and installation of venetian blinds.	Item		450 000.00
9/1/35	Profit on above item.	Item		
9/1/36	Attendance on Ditto.	Item		
	Carried to Trade Summary			R
	PROVISIONAL SUMS			
	Bill No. 1			
	PROVISIONAL AMOUNTS			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

	<u>ACCESS CONTROL, BOOMS, BOLLARDS</u>			
9/1/37	Provide the sum of R30,000.00 (Thirty Thousand Rand) for Access Control, Booms, Bollards, etc supplied and fixed complete.	Item		30 000.00
9/1/38	Allow for general attendance on ditto.	Item		
9/1/39	Allow for profit if required.	Item		
	<u>FLAG POLES AND FLAGS</u>			
9/1/40	Provide the sum of R40,000.00 (Forty Thousand Rand) for Flag Poles and Flags supplied and fixed complete.	Item		40 000.00
9/1/41	Allow for general attendance on ditto.	Item		
9/1/42	Allow for profit if required.	Item		
	<u>ENTRANCE CANOPY STRUCTURAL STEELWORK</u>			
9/1/43	Provide the sum of R4,500,000.00 (Four Million Five Hundred Thousand Rand) for Entrance Canopy Structural Steelwork supplied, erected and painted complete.	Item		4 500 000.00
9/1/44	Allow for general attendance on ditto.	Item		
9/1/45	Allow for profit if required.	Item		
	<u>STRUCTURAL STEELWORK</u>			
9/1/46	Provide the sum of R1,500,000.00 (One Million Five Hundred Thousand Rand) for Structural Steelwork supplied, erected and painted complete.	Item		1 500 000.00
9/1/47	Allow for general attendance on ditto.	Item		
9/1/48	Allow for profit if required.	Item		
	Carried to Trade Summary			R
	PROVISIONAL SUMS			
	Bill No. 1			
	PROVISIONAL AMOUNTS			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>STRUCTURAL STEEL STAIR</u>			
9/1/49	Provide the sum of R450,000.00 (Four Hundred Fifty Thousand Rand) for Structural Steel Stair supplied, erected and painted complete.	Item		450 000.00
9/1/50	Allow for general attendance on ditto.	Item		
9/1/51	Allow for profit if required.	Item		
	<u>HEALTH TECHNOLOGIES</u>			
9/1/52	Provide the sum of R18,500,000.00 (Eighteen Million Five Hundred Thousand Rand) for Health Technologies allowance for installation supply and fixed equipment complete.	Item		18 500 000.00
9/1/53	Allow for general attendance on ditto.	Item		
9/1/54	Allow for profit if required.	Item		
	<u>PORABLE DISPENSARY</u>			
9/1/55	Provide the sum of R1,500,000.00 (One Million Five Hundred Thousand Rand) for Chronic Medication Dispensary (Collect & Go), <i>refer to Clicks catalogue</i> , allowance for installation supply and fixed equipment complete.	Item		1 500 000.00
9/1/56	Allow for general attendance on ditto.	Item		
9/1/57	Allow for profit if required.	Item		
	<u>BUDGETARY ALLOWANCE</u>			
	<u>The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent</u>			
	<u>EMPLOYMENT OF A CLERK OF WORKS</u>			
9/1/58	Provide the amount of R840,000.00 (Eight Hundred Forty Thousand Rands) for a Clerk of Works.	Item		840 000.00
	<u>Carried to Trade Summary</u>			
	PROVISIONAL SUMS			
	Bill No. 1			
	PROVISIONAL AMOUNTS			
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>			

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

9/1/59	Profit on above item.	Item			
9/1/60	Attendance on ditto.	Item			
<u>EMPLOYMENT OF A RESIDENT ENGINEER</u>					
9/1/61	Provide the amount of R840,000.00 (Three Hundred and Sixty Thousand Rands) for a Resident Engineer.	Item		840 000.00	
9/1/62	Profit on above item.	Item			
9/1/63	Attendance on ditto.	Item			
<u>COMMUNITY LIAISON OFFICER</u>					
9/1/64	Provide the sum of R240,000.00 (Two Hundred Forty Thousand Rands) for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid a minimum allowance of R7 500.00 a month for the duration (24 months).	Item		240 000.00	
9/1/65	Profit on above item.	Item			
9/1/66	Attendance on Ditto.	Item			
<u>PROJECT STEERING COMMITTEE</u>					
9/1/67	Provide the amount of R100,000.00 (One Hundred Thousand Rand) for a minimum of four project steering committee members to attend one meeting per month for the duration of the contract. (R 500,00 per month per PSC member for duration of contract).	Item		100 000.00	
9/1/68	Profit on above item.	Item			
9/1/69	Attendance on ditto.	Item			
<u>Carried to Trade Summary</u>					
PROVISIONAL SUMS Bill No. 1 PROVISIONAL AMOUNTS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>					
R					

**Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly**

	<u>EPWP TRAINING</u>			
9/1/70	Provide the sum of R 400,000.00 (Four Hundred Thousand Rand) for training, accommodation, travelling, and payment of wages as if they were on site paid to targeted labour in terms of formal training.	Item		400 000.00
9/1/71	Profit on above item.	Item		
9/1/72	Attendance on ditto.	Item		
	<u>HIRING OF MOBILE FLUSH TOILETS INCLUDING SERVICING, DELIVERY AND COLLECTION</u>			
9/1/73	Budgetary Allowance of R1,500,000.00 (One Million Five Hundred Thousand Rand) for the hiring of 3No. (Three) Flush Mobile Toilet Units for the duration of 24 (Twenty Four) months including delivery, collection and servicing of units twice a week.	Item		1 500 000.00
9/1/74	Allow for profit if required.	Item		
	Carried to Trade Summary		R	
PROVISIONAL SUMS Bill No. 1 PROVISIONAL AMOUNTS <i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>				

Major Refurbishment and Additions to the existing
Galeshewe Day Hospital
in Kimberly

Section No. 9 PROVISIONAL SUMS Bill No. 1 PROVISIONAL AMOUNTS <u>COLLECTION PAGE</u>	Page No	Amount R
Total Brought Forward from Page No.	301	
Total Brought Forward from Page No.	302	
Total Brought Forward from Page No.	303	
Total Brought Forward from Page No.	304	
Total Brought Forward from Page No.	305	
Total Brought Forward from Page No.	306	
Total Brought Forward from Page No.	307	
Total Brought Forward from Page No.	308	
Carried to Final Summary		R
PROVISIONAL SUMS		
Bill No. 1		
PROVISIONAL AMOUNTS		
<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		

Section No	FINAL SUMMARY	Page No	Amount R
1	PRELIMINARIES	30	
2	BUILDING WORKS	131	
3	ELECTRICAL INSTALLATION	159	
4	MECHANICAL INSTALLATION	258	
5	DEMOLITIONS	263	
6	EXTERNAL WORKS	288	
7	BOUNDARY, RETAINING, ETC.	293	
8	OCCUPATIONAL HEALTH AND SAFETY	300	
9	PROVISIONAL SUMS	309	
	Sub Total		R
	Contingencies @ 8.50%		R
	Sub-total		R
	Provide the amount of R 10,000, 000.00 (Ten Million Rands) for CPAP as indicated in the Preliminaries Bill to be used in terms of the Principal Building Agreement.	Item	10 000 000.00
	Sub-total.		R
	Add: Value Added Tax (VAT) @ 15%		R
	TOTAL CARRIED TO FORM OF TENDER		R
	<i>DARK HORSE PROJECTS & INVESTMENT GROUP (PTY) Ltd</i>		