

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No.1
ITEM No.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT KShs cts
	<b>PRELIMINARIES &amp; GENERAL CONDITIONS</b> =====				
<b>01</b>	<b><u>EMPLOYER</u></b>				
A	The Employer is the Kenya Airports Authority. The terms "Employer" and "KAA" wherever used in any contract Document shall be synonymous				
<b>02</b>	<b><u>DEFINITION OF TERMS</u></b>				
B	'Approved' shall mean approved by the Project Manager at his absolute discretion				
C	'Directed' shall mean directed by the Project Manager at his absolute discretion				
D	'Selected' shall mean directed by the Project Manager at his absolute discretion				
E	'B.S.' - shall mean the current British Standard Specification published by the British Standards Institution, 2 Park Street, London, W1A 2BS, England				
F	'K.S.' - shall mean the current Kenya Standard Specification published by the Kenya Bureau of Standards Institution.				
G	CM - shall mean cubic metre SM - shall mean square metre LM - shall mean linear metre MM - shall mean millimeter KG - shall mean Kilogramme NO - shall mean Number				
H	Ditto - shall mean the whole of the preceding description except as qualifies in the description in which it occurs Where it occurs in descriptions of succeeding items it shall mean the same as in the first descriptions of the series in which it occurs except as qualified in the description concerned.				
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

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A	KShs - shall mean Kenya Shillings				
B	'As described' shall mean as described in the 'Descriptions of Materials and Workmanship' contained in the Appendices to these Bills of Quantities				
03	<b><u>GROUPED SIZES</u></b>				
C	Girths, depths, or sizes grouped together in the Bills of Quantities item descriptions by means of hyphenated upper and lower limits shall be interpreted as 'exceeding' the lower limit and 'not exceeding' the upper limit.				
04	<b><u>DESCRIPTION OF SITE</u></b>				
D	The site of the proposed works is within Banisa Airstrip in Mandera County. The Contractor is recommended to visit the site and will be deemed to have satisfied himself with regard to the conditions of the site.				
05	<b><u>DESCRIPTION OF THE WORKS</u></b>				
E	The works in this contract comprise :-  i) Construction to completion of Gate House and Gate ii) Construction to completion of Washrooms iii) Associated Electrical and Mechanical works iv) Construction of a High-Density Galvanized Welded Razor Mesh Fence				
06	<b><u>AREA TO BE OCCUPIED BY CONTRACTOR</u></b>				
F	The area of the site which may be occupied by the Contractor for use as storage or for the erection of workshops etc. shall be defined on the site by the Project Manager and the Contractor must confine his activities to the areas so marked and must ensure that his own and his sub-contractors workmen do not trespass on the adjoining property or cause inconvenience to its occupiers.				
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<b>07</b>	<b><u>SITE VISIT &amp; EXAMINATION OF DRAWINGS</u></b>				
A	The Contractor is recommended to examine the original drawings and to satisfy himself regarding their details and regarding the extent and the nature of the works and the method of construction involved, and visit the site to familiarize himself with all local conditions before tendering. He shall be deemed to have acquainted himself with the nature of the existing conditions or any other matter which may affect his tender. No claim arising from his failure to comply with this recommendation will be considered. Drawings may be seen by appointment at the office of the General Manager (P & ES), KAA, during normal working hours.	ITEM			
<b>08</b>	<b><u>VALUATION OF LUMP SUM COSTS.</u></b>				
B	Lump sums entered in these Bills of Quantities against any item of Preliminaries and General Conditions will be included in appropriate valuations according to reasonable assessment of actual costs involved in the item. Any balance between this assessment and the actual sum entered in the Bills of Quantities will be included in subsequent valuations as monthly installments over the balance of the Contract Period.	ITEM			
<b>09</b>	<b><u>PAYMENT FOR MATERIALS ON SITE</u></b>				
C	All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, Nominated Sub-Contractors, and Nominated Suppliers.	ITEM			
<b>10</b>	<b><u>CONTRACT AGREEMENT AND CONDITIONS</u></b>				
D	The Instructions to Tenderers and Conditions of Contract shall be the 'Standard Tender Document for Procurement of Works' printed in November 2001, published by the Public Procurement Directorate, Ministry of Finance and Planning. For the purposes of this Contract the said Schedule of Conditions and any such note or amendments shall be read and construed together.	ITEM			
<b>11</b>	<b><u>TOOLS, PLANT, ETC.</u></b>				
E	The Contractor shall allow for providing all ladders, tools, plant and transport required for the works, except in so far as may be specifically stated otherwise herein.	ITEM			
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<b>12</b>	<b><u>SAFETY, HEALTH AND WELFARE OF WORKPEOPLE</u></b>				
A	The Contractor shall allow for providing for the safety, health and welfare of workpeople and for complying with any relevant Ordinances, Regulations or Union Agreement.	ITEM			
<b>13</b>	<b><u>NATIONAL INSURANCE AND PENSIONS</u></b>				
B	The Contractor shall allow for making any National Hospital Insurance and National Social Security Fund payments due in respect of workpeople.	ITEM			
<b>14</b>	<b><u>HOLIDAYS AND TRANSPORT FOR WORKPEOPLE</u></b>				
C	The Contractor shall allow for providing holidays and transport for workpeople and for complying with any relevant Ordinances, Regulations or Union Agreement.	ITEM			
<b>15</b>	<b><u>TRAINING LEVY</u></b>				
D	The Contractor's attention is drawn to Legal Notice No. 237 of October, 1971, which requires payment by the Contractor of a Training Levy on all contracts of more than Shs. 50,000/ in value and his tender must include for all costs arising or resulting therefrom. Proof of payment of this Training Levy will be required.	ITEM			
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<b>16</b>	<b><u>PROTECTION OF WORKS AND PERSONS</u></b>				
A	<p>The Contractor shall allow for the protection of his own and his Sub Contractor's work liable to damage, including provision of temporary roofs, gutters, drains, etc., if necessary and shall case up, cover, or in other suitable ways protect all finished work liable to injury, to the satisfaction of the Project Manag, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians. The Contractor shall allow for providing all watching, lighting, barriers, covering open trenches and protection of the works, including Sub Contract works, as may be necessary for the safety of the works and for the protection of the public and his own and Sub Contractors' employees.</p> <p>In the event of any damage or loss occurring to the works, or to materials or to any sewers, gullies, drains, paths, or other works on the site in temporary possession of the Contractor for the purpose of this Contract, either from the weather, want of proper protection, defects, theft, insufficiency of the works, or any other cause whatsoever during the progress of the works, or for any accident or damage to property or persons by reason of the said works, the Contractor alone shall be responsible and shall without extra charge, make good all damage and pay all costs incurred.</p>	ITEM			
<b>17</b>	<b><u>STANDARDS LEVY AND STANDARDS ACTS</u></b>				
B	The Contractor's attention is drawn to legal notice No. 267 of 1990 which requires payment by Contractors of an annual Standards Levy and his tender must include for all costs arising or resulting therefrom.	ITEM			
<b>18</b>	<b><u>NATIONAL CONSTRUCTION AUTHORITY LEVY</u></b>				
C	The Contractor shall allow 0.5% of the Cost of construction as a levy payable to the National Construction Authority in accordance with Section 31 of National Construction Act No. 41 of 2011. Note that this must be paid before Commencement of the Works	ITEM			
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<b>19</b>	<b><u>POLICE REGULATIONS</u></b>				
A	The Contractor shall allow for complying with any relevant police regulations.	ITEM			
<b>20</b>	<b><u>PROCEDURE AND TIME FOR COMPLETION</u></b>				
B	The Contractor shall proceed with the works in such manner and such order as the Project Manager may direct.	ITEM			
<b>21</b>	<b><u>PROGRAMME AND PROGRESS</u></b>				
C	The Contractor shall furnish to the Project Manager, within 7 days, for approval and display in the site offices, a programme and progress chart devised in such a way that the lined programme is shown and progress can be marked up as the work proceeds. The Contractor shall keep this chart up to date at all times.	ITEM			
<b>22</b>	<b><u>WORKING HOURS</u></b>				
D	Generally there will be no restrictions on working hours. In the interest of the usage of the new property the employer may require that overtime be worked so as to complete the works as quickly as possible.  The Contractor must allow for all costs in complying with the Project Managers instructions of working outside normal hours. No claims for extras in connection with this compliance will be entertained.	ITEM			
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23	<b><u>DAYWORKS</u></b>				
A	<p>The Project Manager, if in his opinion it is necessary or desirable, order in writing that any additional or substituted work shall be executed on a Daywork basis. The Contractor shall then be paid for such work in accordance with Daywork rates and percentage additions as inserted hereafter in these Bills of Quantities.</p> <p>The Contractor shall furnish to the Project Manager all receipts or vouchers as may be necessary to prove the amounts paid and before ordering materials shall submit to the Project Manager quotations for the same for his approval.</p> <p>In respect of all work executed on a Daywork basis the Contractor shall, during the continuance of such work, deliver each day to the Project Manager a list in duplicate of the names, occupation and time of all workmen employed on such work and a statement also in duplicate showing the description and quantity of all materials and plant used thereon or therefore (other than plant which is included in the percentage addition on net amount of wages). One copy of each list and statement will, if correct or when agreed, be signed by the Project Manager and returned to the Contractor.</p> <p>At the end of each month the Contractor shall deliver to the Project Manager a priced statement of the labour, material and plant (except as aforesaid) used and the Contractor shall not be entitled to any Payment unless such lists and statements have been fully and punctually rendered. Provided always that, if the Project Manager shall consider that for any reason the sending of such list or statement by the Contractor is impracticable, he shall nevertheless be entitled to authorise payment for such work either as Daywork (on being satisfied as to the time employed and plant and materials used on such work) or at such value thereof as he shall consider fair and reasonable accordance with the foregoing provision was authorise payment for such work either as Daywork (on being satisfied as to the time employed and plant and materials used on such work) or at such value thereof as he shall consider fair and reasonable.</p>	ITEM			
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24	<b><u>WATER FOR THE WORKS</u></b>				
A	The Contractor shall allow for providing all temporary water supplies required for the works, including Sub Contract works, together with all necessary storage tanks, meters and distribution systems for the same and must allow for bearing all expenses incurred and paying for all water consumed without charge to any Sub Contractor. Expenses in connection with Nominated Sub Contractors should be allowed for in the attendance items under the relevant P.C. Sums.  Existing water supplies may be utilized by agreement with the Employer who however gives no undertaking as	ITEM			
25	<b><u>LIGHTING AND POWER FOR THE WORKS</u></b>				
B	The Contractor shall allow for providing all temporary lighting and power supplies required for the works, including Sub Contract works, together with all necessary meters and distribution systems for the same and must allow for bearing all expenses incurred and paying for all current consumed without charge to any Sub Contractor. Expenses in connection with Nominated Sub Contractors should be allowed for in the attendance items under the relevant P.C. Sums.  Existing mains power supplies may be utilized by agreement with the Employer who however gives no undertaking as to the sufficiency or suitability of existing supplies.	ITEM			
26	<b><u>SIGNPOST</u></b>				
C	The Contractor shall erect and maintain a signpost describing the nature of the project, names of the consultants, names of the contractor and his sub-contractor's and any other details as specified by the Project Manager (The signboard being 1200mm x 600mm Gauge 14 (1.99mm thick) mild steel plate welded onto 50mm x 50mm x 3mm square hollow sections frame, 2.5m frame with 0.5m fixed below ground, and painted KAA colours for the duration of the project including the defects liability period).	ITEM	1		
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27	<b><u>SITE OFFICES</u></b>				
A	<p>The Contractor must allow for erecting and maintaining on the site in such positions as may be directed, adequate site offices for the use of his own site staff and and Employer's Site Staff as per the drawing attached or issued by the Project Manager. The office shall revert back to the client upon conclusion of the contract. Nonetheless, the cost to include the cost of removing the same at completion and making good all surfaces disturbed if required to do so. The site office shall have sufficient furniture to permit the Project Manager to hold site meetings in it. The site office shall conform to requirements set out in the drawings provided and shall be approved by the Project Manager.</p> <p>The Contractor shall also allow for providing, erecting and maintaining where directed a lock up hut containing a pedestal type water closet and wash basin for the sole use of the Project Manager and other consultants, including making temporary connections to drains and water supplies and paying all charges for connections, conservancy and water consumed.</p> <p>The Contractor shall also allow for providing the services of a sweeper, for keeping both office and closet in a clean and sanitary condition from the commencement to completion of the works; and for dismantling at completion and making good all disturbed surfaces. The office and closet shall be completed before the Contractor will be permitted to commence the works.</p>	ITEM			
28	<b><u>SHEDS FOR STORAGE OF MATERIALS</u></b>				
B	<p>The Contractor shall provide, erect and maintain on the site, in such positions as may be directed, ample temporary watertight, lock up sheds for the proper storage and protection of cement and other materials liable to damage and shall remove same at completion and make good all surfaces disturbed. He shall also provide space for storage accommodation which Sub Contractors may wish to erect for themselves.</p>	ITEM			
29	<b><u>SPACE FOR STORAGE SHEDS AND SITE OFFICES</u></b>				
C	<p>The site is developed, so space for site offices and storage accommodation, as described above, will be extremely limited.</p> <p>The Contractor shall allow for all necessary temporary erection, dismantling and re-erection of site offices and storage sheds made necessary by the restricted nature of the site.</p>	ITEM			
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

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30	<b><u>SANITATION OF THE WORKS</u></b>				
A	The Contractor shall allow for providing the necessary latrines for the labour employed on the works, including labour employed by Sub Contractors, to the satisfaction of the Health and Medical Authorities and for maintaining the same in a thoroughly clean and sanitary condition and paying all conservancy fees.				
	The Contractor shall allow for removing the said latrines and leaving the ground clean and free from pollution upon completion to the satisfaction of the Health and Medical Authorities.	ITEM			
31	<b><u>NO WORKMEN TO BE HOUSED ON SITE</u></b>				
B	No labour with the exception of a watchman may be housed on the site. The cost of transporting labour to and from the site or elsewhere will be deemed to be included in the tender.	ITEM			
32	<b><u>HOARDING</u></b>				
C	The Contractor shall allow for providing and clearing away on completion such hoarding, fencing, gates etc. as may be required for the security of the site, and as instructed by the Project Manager to prevent access to the site by the public. The exact location and type of these items are to be agreed with the Project Manager and negotiated with the local Authority by the Contractor who will also be responsible for paying any fees or taxes to the Local Authority in respect of the hoarding, fencing or gates and providing any drawings necessary for approval.				
	The Contractor shall allow for thoroughly maintaining the hoarding and gates throughout the Contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this accordingly.	ITEM			
33	<b><u>TRADE NAMES</u></b>				
D	Where trade names or manufacturers' catalogue numbers are mentioned in these Bills of Quantities, the reference is intended as a guide to the type of article or quality of materials required. The Contractor may use any article or material equal in type or quality to those herein described subject to the prior approval of the Project Manager and at his absolute discretion. The onus of proof as to equivalent quality will rest with the Contractor, whose tender will be deemed to include for the makes described herein.	ITEM			
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34	<b><u>REMOVAL OF PLANT, RUBBISH ETC</u></b>				
A	The Contractor must allow for removing and clearing away all plant, rubbish and unused materials, and leaving the whole of the site of the works in a clean and tidy state at completion to the satisfaction of the Project Manager. He must also allow for removing all rubbish and dirt from the site as it accumulates during the performance of the Contract.	ITEM			
35	<b><u>DEDUCTION FROM MONEY DUE TO THE CONTRACTOR</u></b>				
B	The Project Manager shall be entitled to deduct any monies which the Contractor shall be liable to pay under the Contract to the Employer from any sum which may become payable to the Contractor hereunder and the Project Manager in issuing his Certificates as provided in Clause 34 of the Schedule of Conditions shall have regard to any sum so chargeable to the Contractor. Provided always that this provision shall not affect any other remedy by action at law or otherwise to which the Employer may be entitled for the recovery of such monies.	ITEM			
36	<b><u>WORKS TO BE DELIVERED UP CLEAN</u></b>				
C	On completion of the Contract, the site and the works shall be cleared of all plant, scaffolding, rubbish and unused materials and shall be delivered up clean and in perfect condition in every respect to the satisfaction of the Project Manager. Particular attention is to be paid to leaving all windows and floors clean and removing all paint and cement stains.	ITEM			
37	<b><u>APPROVAL OF PROJECT MANAGER FOR EMPLOYMENT OF SUB CONTRACTORS</u></b>				
D	The Contractor will be required to obtain the approval of the Project Manager in writing before Employing any of his own Sub Contractors for any portion of the work.	ITEM			
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

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38	<b><u>DISPOSAL OF WATER</u></b>				
A	Allow for keeping the excavations and works free from all water, including spring and running water, by pumping or other means as required.	ITEM			
39	<b><u>WHITE ANTS</u></b>				
B	Allow for destroying any white ants' nests found in the vicinity of the buildings, destroying Queen Ants, depositing cyanide lumps in holes and tunnels and filling with hardcore and murram well rammed and sealed.	ITEM			
40	<b><u>SECURITIES</u></b>				
C	Allow for the provision of Securities	ITEM			
41	<b><u>INSURANCE</u></b>				
D	Allow for the provision of Insurance for the works, plant and material	ITEM			
E	Ditto for Equipment	ITEM			
F	Ditto for other property	ITEM			
G	Ditto but against accidents or personal injury or death to workmen and third party	ITEM			
42	<b><u>OPERATION EXPENSES</u></b>				
H	Allow for the adequate provision of miscellaneous expenses to cater for project staff comprising stationery, general office consumables, airtime, teas & lunches, printing, scanning and other charges where directed by the Project Manager for the entire contract duration	ITEM			
	Allow for Contractor's Profit	%			
	Allow for Contractor's Overheads	SUM			
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43 B	<p><b><u>SAMPLES</u></b></p> <p>Note: - The Contractor shall allow for furnishing at his own cost any samples of materials or workmanship that may be called for by the Architect for his approval and any further samples in the case of rejection until such samples are approved by the Architect and the Architect may reject any materials or workmanship not in his opinion in accordance with the approved samples. The Architect shall make such tests of the samples or any materials as he may at his discretion deem desirable, but such tests shall be made at the expense of the Employer and not of the Contractor, unless the result causes the Architect to reject any samples or materials as not being in his opinion in accordance with the specified requirements, in which case the Contractor shall pay for such tests and the cost thereof shall be recovered from the Contractor by the Architect by deduction from the Contract Sum.</p>																								
44 C	<p><b><u>NECESSARY TESTS</u></b></p> <p>Allow for all expenses in connection with the testing of materials as specified hereunder including the supply and preparation of materials to be tested, the cost of materials and their packing and conveyance to the nearest approved Testing Laboratory, laboratory charges, etc.</p> <p>The following items of tests will be measured according to the number of tests actually called for by the Architect but unsuccessful tests will not be included in the remeasurement.</p> <p><u>Allow for executing the following tests as detailed in the Appendices to these Bills of Quantities (PROVISIONAL QUANTITIES)</u></p> <table><tr><td>Water Test (4.5 litres)</td><td>20</td><td></td></tr><tr><td>Sand Test (0.028m3)</td><td>20</td><td></td></tr><tr><td>Aggregate Test (0.028m3)</td><td>20</td><td></td></tr><tr><td>Reinforcement test (1m of mild steel rod or high tensile steel bar of various sizes)</td><td>30</td><td></td></tr><tr><td>Concrete Test (One test comprising three cubes as described hereinafter)</td><td>30</td><td></td></tr><tr><td>Testing of concrete or stone blocks various strengths in accordance with British Standard Specification (one test comprising six blocks)</td><td>30</td><td></td></tr><tr><td colspan="3">The Contractor shall allow for all other testing of materials, apart from the above, required by the Appendices of the Bills of Quantities and he shall be responsible for all expenses incurred in completing such tests including costs of materials and labour, equipment, transport and charges of testing authority, etc.</td></tr></table>	Water Test (4.5 litres)	20		Sand Test (0.028m3)	20		Aggregate Test (0.028m3)	20		Reinforcement test (1m of mild steel rod or high tensile steel bar of various sizes)	30		Concrete Test (One test comprising three cubes as described hereinafter)	30		Testing of concrete or stone blocks various strengths in accordance with British Standard Specification (one test comprising six blocks)	30		The Contractor shall allow for all other testing of materials, apart from the above, required by the Appendices of the Bills of Quantities and he shall be responsible for all expenses incurred in completing such tests including costs of materials and labour, equipment, transport and charges of testing authority, etc.			ITEM		
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<b>45</b>	<b><u>SITE PHOTOGRAPHS</u></b>				
A	The Contractor shall take and hand over to the Architect at approved intervals site progress photographs in a format to be directed by the Architect.	ITEM			
<b>46</b>	<b><u>HOISTING</u></b>				
B	The Contractor shall allow for all costs related to hoisting his and his Sub Contractor's materials for fixing at any level within the limits shown on the drawings or included in the general description of the works.	ITEM			
<b>47</b>	<b><u>SCAFFOLDING</u></b>				
C	The Contractor shall allow for providing, erecting and dismantling all general scaffolding required for the works. The Contractor must allow here or in his rates for providing all special scaffolding required by his Sub Contractors, other than Nominated Sub Contractors carrying out works for which P.C. Sums are included in these Bills. Where the Contractor is required to provide special scaffolding for these latter Sub Contractors, an item is included for pricing under the relevant P.C. Sum.	ITEM	1		
<b>48</b>	<b><u>CROSSINGS AND TEMPORARY ROADS</u></b>				
D	The Contractor must allow for providing, forming and maintaining necessary crossings on to the site and temporary roads as may be required by the Architect and removing same at completion and making good damaged or disturbed surfaces as directed by and to the approval of the Architect.	ITEM			
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

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<b>ITEM No.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>AMOUNT KShs    cts</b>
<b>49</b>	<b><u>WORK TO BE OPENED UP AT THE REQUEST OF THE ARCHITECT</u></b>				
A	<p>The Contractor shall, at the request of the Architect within such time as the Architect shall name, open for inspection any work covered up, and, should the Contractor refuse or neglect to comply with such request, the Architect may employ workmen other than those employed by the Contractor to open up the same.</p> <p>If the said work has been covered up in contravention of the Architect's instructions, or if, on being opened up, it be found not in accordance with the drawings or Bills of Quantities or the instructions of the Architect, the expenses of opening and covering it up again whether done by the Contractor or by the Architect, shall be borne by and be recoverable from the Contractor or may be deducted from any monies due to the Contractor. If the work has not been covered up in contravention of such instructions and be found in accordance with the said drawings and Bills of Quantities, then the expenses aforesaid shall be borne by the Employer, and be added to the Contract Sum; provided always that, in the case of foundations or of any other urgent work so opened up and requiring immediate attention, the Architect shall, within a reasonable time after the work has been opened, make or cause to be made the inspection thereof, and at the expiration of such time, if such inspection shall not have been made the Contractor may cover up the same and shall not be required to open it up again for inspection except at the expense of the Employer.</p>	ITEM			
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No.1
ITEM No.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT KShs cts
50	<p>Note: the following items for housing, offices and laboratory for the Engineer shall include all costs involved in providing and maintaining such buildings, including the Contractor's overheads and profit</p> <p><b><u>Office for Engineer</u></b></p> <p>A Provide and maintain a furnished Engineers Represenataive office as shown in the drawings or as instructed by the Engineer for use during the duration of the contract. Ownership to revert to the client at the end of the contract.</p> <p><b><u>Quality Control &amp; Materials Testing</u></b></p> <p>B Allow a Prime Cost Sum of Kshs.400,000/= for Quaity Control and Materials Testing including purchase of equipments whose ownership will revert back to the client.</p> <p>C Include percentage of P.C Sum in item "B" above for contractor's overheads and profit.</p> <p><b><u>Provide and maintain Survey Equipment</u></b></p> <p>D Provide and maintain Topcon Total Station for the exclusive use by the Engineer's representative for the entire duration of the contract.</p> <p><b><u>Vehicles for Engineer</u></b></p> <p>E Provide with driver, fuel, service and maintain, insure 1No. New clean 4WD Double cab pick-up vehicle, diesel engine capacity 2500-3000 cc for exclusive use of the Engineer inclusive of the first 5,000 km per vehicle month to Engineer's approval. Vehicle to revert back to the contractor.</p> <p>F E.O Item "E" above for mileages over 5,000 km per vehicle month</p> <p><b><u>Security on site</u></b></p> <p>G Provide for three (3) number of Armed Security throughout the duration of the contract as will be directed by the Resident Engineer</p>	Lump Sum	1		
		PC	1		
		%	1		
		Per Month	12		
		V.mth.	12		
		Km	15,000		
		Month	12		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No.1
ITEM No.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT KShs cts
	<b>TOTAL BROUGHT FORWARD</b>				
H	<b><u>Miscellaneous account for Engineer</u></b> Allow Prime Cost Sum ( P.C. Sum ) of Kshs. 1,000,000 for the Resident Engineer's Miscellaneous account to be spent in whole or part as directed by the Resident Engineer against receipts	P.C. Sum	1	1,000,000	
I	E.O. item "H" above for the contractor's overheads and profit	%			
	<b><u>Attendance to the Engineer</u></b>				
J	Allow Provisional sum amounting to Kshs.4,000,000 for wages and allowances of a site supervisor and Engineers Site staff including overtime whose employment shall be determined by the Employer.	P.C. Sum	1	4,000,000	
K	E.O. item "J" above for the contractor's overheads and profit	%			
L	Provide a Provisional Sum of Kshs 1,500,000 for reimbursement to the Contractor for payment of the Engineer's overtime and allowances in accordance with Clause 140 of the Special Specifications.	P.C. Sum	1	1,500,000	
M	E.O. item 'L' for the contractor's overheads and profit	%			
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

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	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND CHAINKINK FENCE AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>GATE HOUSE</u></b>				
	<b><u>SUBSTRUCTURES</u></b>				
	<b><u>(ALL PROVISIONAL)</u></b>				
01	<b><u>SITE CLEARANCE</u></b>				
A	Clear site of and cutting of medium trees undergrowth including grubbing up of roots and dispose off as directed by the Project Manager	SM	60		
02	<b><u>EXCAVATION</u></b>				
	<b><u>Top Vegetable soil</u></b>				
B	Excavate oversite to remove top vegetable soil with and including existing fill 250 mm deep and dispose off site	SM	60		
	<b><u>Foundation excavation</u></b>				
C	Bulk excavation in existing ground including loose soils n.e. 1.5m dp and cart away resulting debris from site.	CM	30		
D	Excavate in rocky or sandy for column bases	CM	25		
E	Excavate in rocky or sandy for strip tooting	CM	25		
F	Extra over excavation for excavating in Rock in any class	CM	5		
	<b><u>Filling and carting away</u></b>				
G	Return, fill and ram selected excavated material around excavations	CM	40		
H	Load and cart away surplus excavated material as directed by the Consultant	CM	15		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND CHAINKINK FENCE AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
<b>03</b>	<b><u>CONCRETE IN SUBSTRUCTURE</u></b>				
A	50 mm thick concrete 1:4:8 blinding under column bases	SM	5		
B	50 mm thick concrete 1:4:8 blinding under strip foundation	SM	10		
	<b><u>Vibrated Reinforced Concrete Class 25</u></b>				
C	In Strip foundation	CM	2		
D	In Column bases	CM	2		
E	In Column (below ground)	CM	1		
F	In 150 mm thick floor slab	SM	12		
	<b><u>Cement : Sand (1:4)</u></b>				
G	19 mm thick render on sides of slab	LM	15		
<b>04</b>	<b><u>SAWN FORMWORK</u></b>				
H	To vertical edges of floor slab 75 - 150 mm high	LM	15		
I	To vertical sides of column bases	SM	6		
J	To vertical sides of columns (below ground)	SM	6		
K	To vertical sides of strip footing	SM	6		
<b>05</b>	<b><u>HARDCORE</u></b>				
L	300 mm thick approved hardcore bed, handpacked, well watered & well compacted	SM	12		
M	50 mm thick stone dust blinding on hardcore bed	SM	12		
N	Apply Termidor or any other similar and approved anti-termite chemical treatment on hardcore	SM	12		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND CHAINKINK FENCE AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
<b>06</b>	<b><u>DPM AND DPC</u></b>				
A	1000g polythene damp proof membrane laid with 200 end laps under floor slab, on hardcore to the satisfaction of the consultant	SM	12		
B	200 mm wide approved quality 3-ply bituminous felt damp proof course under walls	LM	15		
<b>07</b>	<b><u>REINFORCEMENT</u></b>				
C	Mesh fabric Ref. BRC. A142	SM	12		
	<u>Supply and fix the following high tensile ribbed bars reinforcement bars to BS 4449:2005 including all the necessary cutting, hooking, bending, cutting spacers, binding wire and supporting all in position</u>				
D	8mm diameter	Kg	20		
E	10mm diameter	Kg	80		
F	12mm diameter	Kg	60		
G	16mm diameter	Kg	50		
H	Allow for keeping excavations free from loose/falling material (Planking & Strutting)	ITEM			
I	Allow for keeping excavations free from surface water	ITEM			
<b>08</b>	<b><u>SUBSTRUCTURE WALLING</u></b>				
J	200mm thick natural stone walling in cement/sand (1:3) mortar including hoop iron on every alternate course	SM	20		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs   cts
<div style="text-align: center; border: 2px solid black; border-radius: 10px; padding: 5px; margin: 10px auto; width: 60%;">COLLECTION</div> <div style="margin-top: 20px;"> <p>BROUGHT FORWARD FROM PAGE 90</p> <p>BROUGHT FORWARD FROM PAGE 91</p> <p>BROUGHT FORWARD FROM PAGE 92</p> </div>					
TOTAL SUB-STRUCTURES CARRIED TO BILL SUMMARY					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
09	<b><u>WALLING</u></b>				
A	200mm thick natural stone walling in cement/sand (1:3) mortar including hoop iron on every alternate course	SM	45		
TOTAL WALLING CARRIED TO BILL SUMMARY SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
10	<b><u>CONCRETE WORK</u></b>  <b><u>Vibrated Reinforced Concrete class 25</u></b>				
A	In beams	CM	1		
B	In Columns	CM	1		
11	<b><u>SAWN FORMWORK</u></b>				
C	Sides and Soffitts of beams	SM	15		
D	Sides of columns	SM	11		
E	Edge of suspended slab 75 - 150mm high.	LM	15		
12	<b><u>REINFORCEMENT</u></b>  <u>Supply and fix the following high tensile ribbed bars reinforcement bars to BS 4449:2005 including all the necessary cutting, hooking, bending, cutting spacers, binding wire and supporting all in position</u>				
F	8mm diameter	Kg	115		
G	12mm diameter	Kg	60		
H	16mm diameter	Kg	75		
TOTAL CONCRETE WORKS CARRIED FORWARD TO BILL SUMMARY					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
13	<b><u>ROOF CONSTRUCTION</u></b>				
	<u>All Structural Timber to be</u> <u>Second Grade Celcured</u> <u>Cypress, well treated and or Equal Approved</u>				
A	100 x 50 mm wall plate bolted to wall with and including bolts at 1.0 m centres	LM	15		
B	150 x 50 mm main & intermediate rafters	LM	45		
C	150 x 50 mm ceiling joists	LM	10		
D	100 x 50 mm ties & struts	LM	5		
E	150 x 50 mm ridge board	LM	10		
F	75 x 50 mm purlins	LM	60		
	<u>Pre-painted Covermax CX780 Roof Covering</u>				
G	Approved Gauge 28 pre-painted Covermax CX780 or Equal and approved profiled sheets fixed to trusses as per Structural Engineer's detail drawing	SM	30		
	<u>Fascia Board &amp; barge boards</u>				
H	300 x 25 mm thick wrot prime grade cypress fascia board fixed to end of rafters (m/s)	LM	9		
I	Ditto verge boards fixed to end of purlins (m/s)	LM	9		
J	Knot, stop and prime and apply 3 coats of gloss oil paint on general timber surfaces 200 - 300 mm girth	LM	18		
TOTAL CARRIED TO BILL COLLECTION					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
14	<b><u>RAINWATER DRAINAGE</u></b>				
	<u>Gutter</u>				
A	250 x 250 mm rectangular/box galvanised iron pre-painted gutter in gauge 24 fixed to fascia board (m/S) with and including approved brackets at 1.0 m c/c	LM	18		
B	Extra over gutter for stopped ends	No.	4		
C	Ditto but for 150 mm diameter outlet	No.	2		
	<u>Downpipe</u>				
D	150 mm diameter galvanised iron pre-painted downpipe in gauge 24 fixed to wall with and including holder butts at 1.0 m c/c including cutting and pinning to wall	LM	6		
E	Extra over downpipe for swanneck 600 mm long	No.	2		
F	Ditto but for rain water shoe 300 mm long	No.	2		
15	<b><u>BAT PROOFING</u></b>				
G	Allow for bat proofing approved coffee tray wire as directed by the Architect	SM	15		
16	<b><u>EAVES BOARDING</u></b>				
H	25 mm thick prime grade cypress T & G boarding including all the necessary bearers	SM	15		
I	Sand paper and apply 3 coats of polyurethane lacquer on general timber surfaces	SM	15		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>FINISHES</u></b>				
17	<b><u>FLOOR FINISHES:</u></b>				
	<u>NON-SLIP GRANITO TILES</u>				
	<u>Approved coloured non-slip floor tiles; matt laid to regular pattern; including bedding and jointing in "PEGACOL" tile adhesive or other equal and approved; grouting joints with "BENFER" or other equal and approved epoxy resin-based grout</u>				
A	Approved coloured high quality non-slip ceramic tiles size 300 x 300 x 10 mm fixed in cement on screed backing (m/s)	SM	9		
B	10 x 100 mm high skirting to match tiles	LM	12		
	<u>Cement and Sand (1:5) Screed</u>				
C	30 mm thick floated to receive non-slip ceramic tiles	SM	9		
TOTAL FLOOR FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
18	<b><u>EXTERNAL WALL FINISHES</u></b>				
A	15mm Cement and sand (1:4) external rendering on external surfaces of walling finished smooth with a wood float.	SM	25		
B	Extra over pointing to stone walling to Project Manager's details.	SM	35		
	<b><u>PAINT</u></b>				
C	Prepare and apply "Wall master" or equal approved cement and polymer based wall coating according to Manufacturer's instructions and Project Architect's specifications and approval to beams and columns.	SM	25		
19	<b><u>INTERNAL WALL FINISHES</u></b>				
	<b><u>Gauged plaster (1:1:6)</u></b>				
D	12 mm thick gauged plaster applied to stonework internally	SM	35		
	<b><u>Paint</u></b>				
E	Skim/Smoothen plastered surfaces with 'CROWN' Wallcare or other equal and approved skimmer; Prepare and apply 3 coats of first grade Silk Vinyl Plastic Emulsion (Bacteria/Algae Resistant) paint on plastered surfaces internally	SM	35		
TOTAL WALL FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
20	<b><u>CEILING FINISHES</u></b>				
A	12 mm thick gypsum on and including 50 x 50 mm sawn treated timber framework where directed by the Architect	SM	9		
B	Prepare and apply 3 coats of distemper to ceiling surfaces	SM	9		
	<u>Cornice</u>				
C	75 x 75 mm wrot cypress moulded Cornice	LM	12		
D	Knot, prime and stop and apply 3 coats of polyurethane on general timber surfaces 100 - 200 mm girth	LM	12		
E	Prepare and apply primer to back of cornice only n.e. 100 mm girth	LM	12		
TOTAL CEILING FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>OPENNINGS</u></b>				
21	<b><u>DOORS</u></b>				
	<u>Steel door</u>				
A	Size 1000 x 2400 mm high overall heavy duty steel grilled door as per schedule of openings including all the necessary ironmongery including a heavy duty 5-lever metal casement cylinder lock and hanging and closing accessories to approval and all the necessary glazing	No.	1		
B	Prime metal surfaces, prepare and apply three coats of grade gloss oil paint to general surfaces externally	SM	3		
C	Ditto but internally	SM	3		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					





	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
22	<b><u>WINDOWS</u></b>  <u>Steel casement windows including all necessary fixing and locking ironmongery, glazing and all necessary glazing beads all as per schedule of windows</u>				
A	Size 1500 x 1500 mm high window including 6 mm thick approved solar-treated glazing with one-way tint  <u>Window Blinds</u>	No.	3		
B	Supply and fix horizontal heavy duty window blinds with solid and mesh panels, to approved colour scheme and height including all fixing accessories as per approved samples to existing windows Project Architect's approval.  <u>Timber frames</u>  <u>Wrot hardwood</u>	SM	10		
C	Pelmet boxes 300 mm girth to Detail to Project Manager's Approval	LM	7		
D	Window boards 225 - 300 mm wide  <u>Sand down timber surface; Prepare and apply under coat and two coats first class quality 'Pinotex' varnish on pelmet boxes and window boards.</u>	LM	7		
E	Pelmet boxes 300 mm girth	LM	7		
F	Window boards 225 - 300 mm wide  <u>Window Cill</u>	LM	7		
G	250 x 75mm Precast concrete (class 20/12) sunk, weathered and throated cill cart in convenient lengths, reinforced as necessary for handling, bedded, jointed and pointed in gauged mortar and finished fair on all exposed surfaces.	LM	7		
H	Prime metal surfaces, prepare and apply three coats of grade gloss oil paint to general surfaces externally	SM	7		
I	Ditto but internally	SM	7		
23	<b><u>FURNITURE</u></b>  <u>Provide the following to approval of Project Manager:</u>				
J	L-shaped block-board desk	No.	1		
K	Low-back swivel chair	No.	1		
L	Desktop computer	No.	1		
TOTAL WINDOWS CARRIED TO BILL SUMMARY SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 2
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
24	<b><u>EXTERNAL WORKS</u></b> <b><u>(ALL PROVISIONAL)</u></b>  <b><u>Paving slabs</u></b>				
A	Excavate 150 mm average depth and dispose off excavated material as directed.	SM	25		
B	100 mm thick murram sub-base well compacted and watered.	SM	25		
C	600 x 600 x 50 mm precast concrete paving slabs on 50 mm thick sand bed	SM	25		
D	250 x 125 mm precast concrete kerb to paving slabs including all the necessary excavations and concrete haunching.	LM	20		
25	<b><u>GATE</u></b>  <u>Mild steel bars section and plates finished with one case of red oxide primer welded and ground joints (steel section in heavy gauge/ duty)</u>				
E	Supply, fabricate and install galvanized heavy duty metal gate overall size 6000 x 2400mm high; in two equal leaves; with and including 100 x 100 x 6mm SHS fixed firmly to the ground in approved concrete base; 8 gauge welded wire mesh covering fixed to 50 x 50 x 4mm SHS and tower locking heavy gauge bolt (including VIRO Cylinder 104); 3 lines of 12.5 gauge barbed wire at the top of each leaf; all as per attached drawings and approval of Project Manager. Gate to be painted in three coats of approved protective paint.	NO	2		
F	Supply materials, fabricate and install galvanized heavy duty metal gate overall size 1000 x 2400mm high pedestrian gate with and including 75 x 75 x 4mm SHS fixed firmly to the ground in approved concrete base; 8 gauge welded wire mesh covering fixed to 50 x 50 x 4mm SHS and tower locking heavy gauge bolt (including VIRO Cylinder 104); 3 lines of 12.5 gauge barbed wire at the top; all as per attached drawings and approval of Project Manager. Gate to be painted in three coats of approved protective paint. Rate inclusive of casting of beam.	NO	1		
G	Prepare and apply touch-up primer and 3 coats of gloss of gloss oil paint on metal surfaces of grille gates both sides.	SM	65		
<b>TOTAL EXTERNAL WORKS CARRIED FORWARD TO BILL SUMMARY SHEET</b>					

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	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>VIP PIT LATRINE - SUBSTRUCTURES</u></b> <b><u>(ALL PROVISIONAL)</u></b>				
01	<b><u>SITE CLEARANCE</u></b>				
A	Clear site of and cutting of medium trees undergrowth including grubbing up of roots and dispose off as directed by the Project Manager	SM	10		
02	<b><u>EXCAVATION</u></b>				
	<b><u>Top Vegetable soil</u></b>				
B	Excavate oversite to remove top vegetable soil with and including existing fill 250 mm deep and dispose off site	SM	10		
	<b><u>Foundation excavation</u></b>				
C	Bulk excavation in existing ground and cart away resulting debris from site for Latrine Pit.	CM	50		
D	Excavate for strip footing not exceeding 1.5 m deep starting from stripped level.	CM	7		
E	Extra over excavation for excavating in Rock of any class.	CM	5		
	<b><u>Filling and carting away</u></b>				
F	Return, fill and ram selected approved imported material around excavations	CM	3		
G	Load and cart away excess excavated material	CM	4		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
03	<b><u>CONCRETE IN SUBSTRUCTURE</u></b>				
A	50 mm thick concrete 1:4:8 blinding under strip foundation.	SM	5		
	<b><u>Vibrated Reinforced Concrete Class 25</u></b>				
B	In strip foundation	CM	1		
C	In 150 mm thick floor slab	SM	8		
	<b><u>Cement : Sand (1:4)</u></b>				
D	19 mm thick render on sides of slab	LM	10		
04	<b><u>SAWN FORMWORK</u></b>				
E	To vertical edges of floor slab 75 - 150 mm high	LM	10		
F	To vertical sides of strip footing	SM	5		
05	<b><u>HARDCORE</u></b>				
G	300 mm thick approved hardcore bed, handpacked, well watered & well compacted	SM	8		
H	50 mm thick stone dust blinding on hardcore bed	SM	8		
I	Apply Termidor or any other similar and approved anti-termite chemical treatment on hardcore	SM	8		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
06	<b><u>DPM AND DPC</u></b>				
A	500g polythene damp proof membrane laid with 200 end laps under floor slab, on hardcore to the satisfaction of the consultant	SM	8		
B	200 mm wide approved quality 3-ply bituminous felt damp proof course under walls	LM	8		
07	<b><u>REINFORCEMENT</u></b>				
C	Mesh fabric Ref. BRC. A142  <u>Supply and fix the following high tensile ribbed bars reinforcement bars to BS 4449:2005 including all the necessary cutting, hooking, bending, cutting spacers, binding wire and supporting all in position</u>	SM	8		
D	Assorted sizes	Kg	200		
08	<b><u>SUBSTRUCTURE WALLING</u></b>				
E	200mm thick natural stone walling in cement/sand (1:3) mortar including hoop iron on every alternate course	SM	12		
F	Allow for keeping excavations free from loose/falling material (Planking & Strutting)	ITEM			
G	Allow for keeping excavations free from surface water	ITEM			
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

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	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs   cts
09	<b><u>WALLING</u></b>				
A	150mm thick natural stone walling in cement/sand (1:3) mortar including hoop iron on every alternate course	SM	20		
TOTAL WALLING CARRIED TO BILL SUMMARY SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
10	<b><u>CONCRETE WORK</u></b>  <b><u>Vibrated Reinforced Concrete class 25</u></b>				
A	In beams	CM	1		
11	<b><u>SAWN FORMWORK</u></b>				
B	Sides and Soffitts of beams	SM	8		
12	<b><u>REINFORCEMENT</u></b>  <u>Supply and fix the following high tensile ribbed bars reinforcement bars to BS 4449:2005 including all the necessary cutting, hooking, bending, cutting spacers, binding wire and supporting all in position</u>				
C	Assorted Sizes	Kg	120		
TOTAL CONCRETE WORKS CARRIED FORWARD TO BILL SUMMARY					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
13	<b><u>ROOF CONSTRUCTION</u></b> <b><u>(ALL PROVISIONAL)</u></b>  <u>All Structural Timber to be Second Grade Celcured Cypress and Approved</u>  A 100 x 50 mm wall plate bolted to wall with and including bolts at 1.0 m centres B 100 x 50 mm rafters C 100 x 50 mm ceiling joists D 75 x 50 mm purlins  <u>Stone-coated tiles Roof Covering</u>  E Approved Gauge 28 pre-painted Covermax CX780 or Equal and approved profiled sheets fixed to trusses with and including all necessary battens as per Structural Engineer's detail drawing.  <u>Fascia Board</u> F 250 x 25 mm thick wrot prime grade cypress fascia board fixed to end of rafters (m/s) G Ditto verge boards fixed to end of purlins (m/s) H Knot, stop and prime and apply 3 coats of gloss oil paint on general timber surfaces 200 - 300 mm girth				
		LM	6		
		LM	20		
		LM	20		
		LM	15		
		SM	10		
		LM	6		
		LM	6		
		LM	12		
TOTAL CARRIED TO BILL COLLECTION					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
14	<b><u>RAINWATER DRAINAGE</u></b>				
	<u>Gutter</u>				
A	150mm half-round PVC gutter fixed to fascia board (m/s) with and including approved brackets at 1.0 m c/c	LM	3		
B	Extra over gutter for stopped ends	No.	2		
C	Ditto but for 150 mm diameter outlet	No.	2		
	<u>Downpipe</u>				
D	100 mm diameter PVC downpipe fixed to wall with and including holder butts at 1.0 m c/c including cutting and pinning to wall.	LM	3		
E	Extra over downpipe for swanneck 600 mm long	No.	2		
F	Ditto but for rain water shoe 300 mm long	No.	2		
15	<b><u>EAVES BOARDING</u></b>				
G	25 mm thick prime grade cypress T & G boarding including all the necessary bearers	SM	10		
16	<b><u>BAT PRROFING</u></b>				
H	Allow for bat proofing approved coffee tray wire as directed by the Architect	SM	10		
I	Sand paper and apply 3 coats of polyurethane lacquer on general timber surfaces	SM	10		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>FINISHES</u></b>				
17	<b><u>FLOOR FINISHES:</u></b>				
	<u>CEMENT SCREED</u>				
A	Approved coloured steel-trowelled cement and sand (1:5) screed	SM	7		
B	10 x 100 mm high skirting	LM	10		
<b>TOTAL FLOOR FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
18	<b><u>EXTERNAL WALL FINISHES</u></b>				
A	15mm Cement and sand (1:4) external rendering on external surfaces of walling finished smooth with a wood float.	SM	20		
B	Extra over pointing to stone walling to Project Manager's details.	SM	20		
	<b><u>PAINT</u></b>				
C	Prepare and apply "Wall master" or equal approved cement and polymer based wall coating according to Manufacturer's instructions and Project Architect's specifications and approval to beams and columns.	SM	5		
19	<b><u>INTERNAL WALL FINISHES</u></b>				
	<b><u>Cement and Sand (1:5) Screed</u></b>				
D	18 mm thick steel-floated plaster to new masonry walling to receive paint (m/s).	SM	10		
	<b><u>PAINT</u></b>				
E	Skim or smoothen uneven plaster in @"Crown Wallcare" or equal approved; Prepare and apply one coat of undercoat and two finishing coats of first quality grade Silk Vinyl plastic emulsion paint to wall surfaces, beam and column surfaces.	SM	10		
	<b><u>Wall tiles</u></b>				
	<b><u>Approved coloured granito wall tiles matt; laid to regular pattern; including bedding and jointing in "PEGACOL" tile adhesive or other equal and approved; grouting joints with "BENFER" or other equal and approved epoxy resin-based grout</u></b>				
F	600 x 300mm thick glazed granito wall tiles bedded in cement & sand (1:4) mortar on backing screed (m/s).	SM	15		
G	Size 600 x 300 mm Border Tile as per Architectural Drawing	LM	5		
H	Stainless Steel strip Border	LM	5		
I	12 mm thick cement & sand (1:4) backing screed to stonework to receive tiles	SM	15		
<b>TOTAL WALL FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
20	<b><u>CEILING FINISHES</u></b>				
A	12 mm thick chipboard on and including 50 x 50 mm sawn treated timber framework where directed by the Architect/ Project Manager.	SM	7		
B	Prepare and apply 3 coats of silk vinyl emulsion to ceiling surfaces	SM	7		
	<u>Cornice</u>				
C	75 x 75 mm wrot cypress moulded Cornice	LM	10		
D	Knot, prime and stop and apply 3 coats of paint on general timber surfaces 100 - 200 mm girth	LM	10		
E	Prepare and apply primer to back of cornice only n.e. 100 mm girth	LM	10		
<b>TOTAL CEILING FINISHES CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
21	<b><u>OPENINGS</u></b>				
	<b><u>DOORS</u></b>				
	<u>Semi-Solid-core Flush Doors</u>				
	A 900 x 2400 mm high overall solid core flush door including fanlight size 900 x 300mmhigh and glazed view panel as per detail schedule of doors, faced on both sides with mahogany veneer and lipped and edged in hardwood strips to both vertical edges	No.	2		
	<u>Timber frames</u>				
	B 150 x 50 mm wrot rebated hardwood door frame	LM	14		
	C 25 x 25 mm quadrant beading plugged	LM	14		
	D 38 x 25 architrave	LM	14		
	<u>Painting</u>				
	E Prepare and apply 3 coats of gloss oil paint on general timber surfaces	SM	9		
	F Prepare and apply 3 coats of gloss oil paint on timber surfaces 100 - 200 mm girth	LM	14		
	G Prime back of frame n.e 100mm girth	LM	28		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
22	<u>Iron mongery</u>  Supply and fix the following ironmongery as per 'Union' or other similar and approved catalogue to hardwood with screws to match				
A	150 mm long pressed brass-coated butt hinges	Pairs	3.0		
B	3-lever mortice locks complete with handles and furniture brass finished	No.	2		
C	38 mm diameter rubber door stop, floor mounted	No.	2		
D	Door & wall signages to Architect's detail	No.	4		
E	Stainless steel push plates	No.	2		
F	Stainless steel Coat Hooks	No.	2		
	<u>Dowels</u>				
G	10 mm diameter, 200 mm long mild steel dowel one end morticed to wood the other grouted in concrete	No.	4		
	<u>Door cramps</u>				
H	225 x 25 x 3 mm mild steel door cramps, once bent and twice holed, one end screwed to frame the other built in masonry wall	No.	12		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

[illegible]

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
23	<b><u>WINDOWS</u></b>  <u>Approved Powder-coated heavy gauge aluminium windows including all necessary fixing and locking ironmongery, glazing and all necessary glazing beads all as per schedule of windows</u>				
A	Size 900 x 600 mm high window including 6 mm thick obscure glazing with one-way tint  <u>Window Cill</u>	No.	2		
B	250 x 75mm Precast concrete (class 20/12) sunk, weathered and throated cill cart in convenient lengths, reinforced as necessary for handling, bedded, jointed and pointed in gauged mortar and finished fair on all exposed surfaces.	LM	30		
TOTAL WINDOWS CARRIED TO BILL SUMMARY SHEET					

[illegible]

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 3
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>EXTERNAL WORKS</u></b> <b><u>(ALL PROVISIONAL)</u></b>				
21	<b><u>PAVING SLABS</u></b>				
A	Grade surface of fillion to falls and crossfalls including rolling and compacting to B.S. 95%MDD.	SM	15		
B	Approved imported murram laid in 150mm thick layers blinded with quarry dust on each layer and compacted to 100% BS compaction to Civil Engineer's details.	CM	23		
C	300mm bed of approved handpacked stone and compacted stone base well-rammed and compacted to Civil Engineer's details and specification.	SM	15		
D	Approved weedkiller under paving	SM	15		
E	50mm sand bed blinding spread and well compacted to falls and crossfalls and cambers and finished to receive precast concrete block paving (measured separately).	SM	15		
F	600 x 600 x 50 mm precast concrete paving slabs on 50 mm thick sand bed (m/s).	SM	15		
G	250 x 125 mm precast concrete kerb and channel to paving slabs laid on 20mm thick mortar bed, 500 x 100mm class 15/20 concrete base, 100 x 210mm class 15/20 concrete haunch including excavation and disposal to Civil Engineer's details.	LM	20		
<b>TOTAL PAVING SLABS CARRIED TO BILL SUMMARY SHEET</b>					

[illegible]

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 4
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>MECHANICAL WORKS (All Provisional)</u></b>				
01	<b><u>INTERNAL PLUMBING</u></b>				
	<b><u>Supply and install the following pipes; to include the necessary joining connecting</u></b>				
A	40mm PPR PN 20 water pipes	LM	80		
B	32mm PPR pipes PN 20	LM	75		
C	25mm PPR pipes PN 20	LM	60		
D	40mm diameter socket	No	12		
E	40mm diameter bend	No	8		
F	40X32mm PPR male adaptor	No	3		
G	40X32mm PPR female adaptor	No	3		
H	40x32mm m.s reducer	No	5		
I	E.O Ditto for elbow	NO	8		
J	Ditto PPR Tee	No	10		
K	Ditto 25x12.5mm male adaptor	No	13		
L	Ditto 25x12.5mm female adaptor	No	13		
M	25mm Gate valeve	No	3		
N	Allow for tread tape	Item	1		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 4
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
02	<b><u>WASTE WATER DRAINAGE (all provisional)</u></b>				
A	Gulley trap manhole of internal size 200 x 200 x 450mm depth, comprising of 150mm concrete bed class Q, 12mm internal rendering 1:1 100mm pvc gully trap, 300x300mm cast iron manhole cover and concrete benching to 1:6 fall	NO	4		
B	100mm diameter heavy duty pvc pipe laid to fall	LM	20		
C	Ditto but 50mm diameter	LM	10		
D	Backfill excavated trench	LM	15		
E	E.O ditto in inspection tee	No	2		
F	E.O ditto in waste bend	No	2		
G	E.O ditto in vent cowl	No	2		
H	E.O ditto end plug	No	2		
I	110mm diameter galvanised vent pipe clips	No	6		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 4
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
03	<b><u>FIRE FIGHTING EQUIPMENT</u></b>				
	<b><u>Portable fire extinguishers</u></b>				
A	Supply and install 4.5kg CO2 fire extinguisher complete with pressure guage mounting brackets and certified initial charge	No	2		
B	Supply and install 9 litre water fire extinguisher complete with pressure guage mounting brackets and certified initial charge	No	2		
	<b><u>Water Tank</u></b>				
C	Supply and install water storage PVC tank of 10,000litres capacity as 'Roto' or equal approved including mounting to final position and connection to pipe system as directed by Project Manager.	No	2		
D	Allow for testing and commissioning of the water reticulation and drainage systems	ITEM	1		
E	Allow for connection to Local Water Authority Including application and processing.	ITEM	1		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 4
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
<div>COLLECTION</div> <p>BROUGHT FORWARD FROM COLLECTION PG 126</p> <p>BROUGHT FORWARD FROM COLLECTION PG 127</p> <p>BROUGHT FORWARD FROM COLLECTION PG 128</p>					
TOTAL CARRIED TO GRAND SUMMARY					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
	<b><u>ELECTRICAL WORKS</u></b>				
	(ALL PROVISIONAL) Supply and Install: -				
1	<b><u>LIGHTING</u></b>				
A	Lighting points wired in 3x1.5Sq.mm PVC insulated single core (SC) copper wires drawn in 20mm dia. HG PVC conduit concealed in walls and floors, one way switched with all accessories but excluding switch and fitting	No.	10		
B	Ditto, for two way switched lighting points	No.	2		
C	10A plate switch 1 gang one-way SP as MK Cat. No. K4870 WHI	No.	4		
D	10A plate switch 1 gang two-way SP as MK Cat. No. K4871 WHI	No.	4		
E	10A plate switch 3 gang two-way SP as MK Cat. No. K4872 WHI	No.	3		
F	300x200mm rectangular fitting complete with 11W energy saving BC lamp as Micromark Astral Cat. No. MM7531, Type 'D1'.	No.	10		
G	Circular IP54 close surface UV-stable polycarbonate fitting with E27 lampholder (60W) as per OMS 'PLAST' range with E27 lamp, Cat PLAST 3 OPTIC A60 1x60W ,Type 'D2'.	No.	4		
H	Decorative wall fitting to BS EN 61184:1997, incorporating a heat resistant connecting cables, metallic BC lamp holder complete with 11W energy saving lamp as MK Cat No. 11172WHI Type 'G1'.	No.	4		
I	IP 65 rectangular style bulkhead fitting with die-cast aluminium body, glass bowl diffuser and 100W BC lampholder c/w E27 CFL lamp as Thorn OLG 1x100W A60 BC GL WHI, Type 'G2'.	No.	2		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
2.00	<b><u>POWER</u></b>				
A	13 Amp twin socket outlet points wired as for a ring main 3 x 2.5mm <sup>2</sup> PVC SC copper cables drawn in 25mm dia HG PVC in conduits concealed in walls and floors complete with all accessories excluding the socket outlet plate - Ringmain Circuit	No.	3		
B	13A flush 2 gang switch socket-outlet as MK Cat. No. K2747 WHI	No.	2		
C	Watertight 13A flush 2 gang switch socket-outlet as MK Cat. No. K56482WHI	No.	1		
D	20A flex outlet with neon light as MK Cat. No.5423DI WHI	No.	3		
E	20A flush DP switch with neon light marked water heater as MK Cat No. K5423WHWHI	No.	5		
F	12v Photocell Light sensor	No	2		
3	<b><u>TELEPHONE &amp; TV OUTLETS</u></b>				
A	Fully screened non isolated IEC female standard TV/FM co-axial socket as MK K3551WHI	No.	1		
B	1 gang moulded white blanking plate to BS 5733:2010 as MK K3827WHI	No.	1		
C	Standard telephone outlet point	No.	1		
4	<b><u>LIGHTNING PROTECTION</u></b>				
A	Air termination Type Furse RA225 + RA600 fixed to ridge saddle Furse SD155 bolted to roof with water tight rubber	No	2		
B	25mm x 3mm copper tape TC030 on tape clip Furse CP210 fixed at 750mm intervals to approved detail	LM	15		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
C	50mm <sup>2</sup> PVC insulated copper conductor enclosed in 25mm dia HG concealed PVC conduit between copper tape and test joint	LM	25		
D	Lugs for item C). above including fixing bolts to roof conductors	No	3		
E	Test clamps Furse CN305	No	3		
F	Rod to earth conductors clamps Furse CR520	No	3		
G	Earth rods Furse RC015 with driving sud, furse ST015 and spike furse SP015 driven into ground	No	3		
H	125 x 100 x 50mm deep boxes with cover and marked safety earth installed columns to approved detail	No	2		
I	Concrete earthing inspection pits, Furse PT-005	No	2		
G	Test the completed lightning protection system and report results	Item			
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
6	<b><u>SUB MAINS AND DISTRIBUTION</u></b>				
A	Supply and install 12-ways SPN MCB consumer unit	NO.	1		
B	Supply and install 30A, 20A, 10A MCBs and blankingplate to existing consumer unit	NO.	1		
C	Supply and install sub-mains from meter box to consumer unit comprising of 2x16mm <sup>2</sup> PVC single core cables and 16mm <sup>2</sup> PVC cable insulated earth continuity conductor in 32mm diameter heavy gauge PVC conduit	M	20		
D	Earth and label the consumer units to KP&LC standards	NO.	1		
7	<b><u>METER BOARD</u></b>				
A	Supply and install wall mounted weather proof meter board comprising of 80 AMP SP main switch fuse and provide space for 2No. SP KP&LC Ltd meters cut-outs including associated wiring switch gear and earthing terminal	NO	1		
B	Supply and install 80 AMP SP main switch fuse including associated wiring and weather proof GI enclosure at the VIP Lounge	NO	1		
C	Supply and install 16mm sq. 2core PVC SWA PVC armoured copper from the existing meterboard to the new meterboard	M	50		
D	Trenching and backfilling 500mmx600mm deep from power cable routing	M	50		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
<b>8</b>	<b><u>Earthing comprising the following:-</u></b>				
A	1500mm by 12mm diameter copper earth electrode	NO	1		
B	Test Clamp	NO	1		
C	16Sq.mm SC CU PVC earth wire	LM	10		
D	Standard precast earthing manhole	NO	1		
E	20mm diameter conduit drop for green PVC earth wire	LM	8		
<b>10</b>	<b><u>Sundries</u></b>				
A	200 x 200 x 100mm 14 gauge galvanized power draw box complete with cover	NO	2		
B	50mm Diameter PVC heavy gauge ducts concealed in floors,walls and in trench for Telkom Kenya Ltd.	LM	10		
C	Standard precast JF4 earthing manhole ditto	NO	1		
<b>11</b>	<b><u>TESTING AND COMMISSIONING</u></b>				
A	Allow for Testing, Commissioning and Hand over the entire Installation to the Project Manager satisfaction	ITEM			
B	Allow for KPLC liaise on for power supply	ITEM			
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
12	<u>P.C. AND PROVISIONAL SUMS</u>  <u>POWER SUPPLY</u>  A    Include the sum of Kenya Shillings One hundred thousand (Kshs.100,000.00) only for KPLC charges.  B    Add for profit  C    Allow for attendance		SUM  0  SUM		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					



	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 5
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts

## SUMMARY SHEET

BROUGHT FORWARD FROM PG 130

BROUGHT FORWARD FROM PG 131

BROUGHT FORWARD FROM PG 132

BROUGHT FORWARD FROM PG 133

BROUGHT FORWARD FROM PG 134

BROUGHT FORWARD FROM PG 135

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<b>TOTAL CARRIED TO GRAND SUMMARY</b>	
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	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 6
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b><u>FENCE WORKS</u></b>				
A	Clear site by cutting grass, shrubs and other growth to allow on either side of fence for working space as will be instructed by the Engineer.	Ha	8		
	<b><u>Removal of topsoil</u></b>				
B	Topsoil removal to a maximum depth of 200mm including removal of grass and other vegetation as shall be directed by the engineer.	m3	1,800		
	<b><u>Removal/Cutting of Trees &amp; Road Diversion</u></b>				
C	Removal/ Cutting of tall trees in the runway strip and runway approaches including uprooting of tree stumps.	No.	30		
D	Construct 6.0 m wide deviation; all in accordance with the specifications.	Km	1.4		
E	Provision, laying and compaction of gravel wearing course to deviations, 6m wide, 150mm thick, where directed by the Engineer	m <sup>3</sup>	1,260		
	<b><u>Runway Marking</u></b>				
F	Provide and lay Runway Markers being Mass Concrete size 3000mm x 1000mm x 50mm concrete class 20 (10), laid on 50 mm well compacted gravel, and painted with white reflective paint; laid in pairs each edge of runway @ 100M c/c	No	40		
	<b><u>Airport Directional Signs</u></b>				
G	Provide and install Airport directional signs according to the provided details as directed by the Engineer	No	2		
	<b><u>Windsock</u></b>				
H	Provide and erect Windsock complete with Mast fixed to the ground	No	2		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 6
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
	<b>Gates</b>				
I	Supply, fabricate and install galvanized heavy duty metal gate overall size 6000 x 2400mm high; in two equal leaves; with and including 100 x 100 x 6mm SHS fixed firmly to the ground in approved concrete base; 8 gauge welded wire mesh covering fixed to 50 x 50 x 4mm SHS and tower locking heavy gauge bolt (including VIRO Cylinder 104); 3 lines of 12.5 gauge barbed wire at the top of each leaf; all as per attached drawings and approval of Project Manager. Gate to be painted in three coats of approved protective paint.	No	2		
J	Supply materials, fabricate and install galvanized heavy duty metal gate overall size 1000 x 2400mm high pedestrian gate with and including 75 x 75 x 4mm SHS fixed firmly to the ground in approved concrete base; 8 gauge welded wire mesh covering fixed to 50 x 50 x 4mm SHS and tower locking heavy gauge bolt (including VIRO Cylinder 104); 3 lines of 12.5 gauge barbed wire at the top; all as per attached drawings and approval of Project Manager. Gate to be painted in three coats of approved protective paint. Rate inclusive of casting of beam.	No.	1		
K	Excavate holes of 450mm dia and up to 1000mm deep, and cart away waste material to spoil dumps.	CM	500		
L	As item "L" , but in hard material.	CM	50		
M	Provide and install 4.0m minimum overall length and maximum width of 125mm x 125mm reinforced concrete grade B (1:2:4 mix) intermediate posts (cranked at the top) at 3.0 meter center to center with 7 No. holes for straining wires/barbed wire hook bolts, with T10 reinforcement, including concreting of the posts holes up to the ground level.	No	1,901		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 6
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs cts
N	As in item "M" above but for strainer posts up to 3.2m overall length and maximum width of 200mm, and T10 reinforcement.	No	380		
O	As in item "M" but for strainer post struts up to 3.0m overall length and maximum width of 100mm to be placed on either side of strainer posts at 45 degrees to the ground, and T10 reinforcement.	No	380		
P	Supply and Install <b>High-Density Galvanized Welded Razor Mesh</b> with Diamond Appertures; with the following characteristics:- (a) Diamond Mesh Size: 75x150mm; (b) Roll Size: (H)2.4m & (W) 6.0m ; (c) Blade Length: 30mm; (d) Blade Width: 22mm; (e) Blade Spacing: 50mm; (f) Blade Thickness: 0.5mm and (g) Core Wire: Diameter 2.5mm. h) The Galvanised mesh to also have Zinc coating for improved corrosive resistance and to be fastned with 5 No. lines of galvanized wire (m/s) 3.5mm diameter; threaded through and including mesh and hook bolts; secured by binding wire; all as per detail drawings.	M	5,700		
Q	Provide and fix 5 lines of galvanized wire (m/s) <b>9 Gauge (3.5mm diameter)</b> onto the concrete posts threaded through the holes on the posts.	M	28,500		
R	Provide and fix 3 lines of galvanized barbed wire <b>12 1/2 gauge (2.5mm diameter)</b> onto the cranked sections of the concrete posts threaded through the holes on the posts.	M	17,100		
S	Supply and Install Hot Dipped Galvanised Ripper Steel Spiral razor wire (CONCERTINA COIL) 2.5 mm dia. High Tensile, blade/strip 0.55mm, clips 2.0mm, diameter 10mm with hot dipped galvanized surface treatment along the inner face of the fence in 1 layer to Engineer's instructions, in concertina coil of loops 250mm long, 450mm diameter. Length to be measured for each coil separately.	M	11,400		
T	Provide well compacted / vibrated concrete class 20/20mm – 1:2:4 as described in: a)Ground beams and b)Regulating concrete at steep areas up to 100mm	CM CM	35 10		
TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET					

	TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP				BILL No. 6
ITEM No.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KShs    cts
<div>COLLECTION</div>  <div>BROUGHT FORWARD FROM COLLECTION PG 137</div> <div>BROUGHT FORWARD FROM COLLECTION PG 138</div> <div>BROUGHT FORWARD FROM COLLECTION PG 139</div>					
TOTAL CARRIED TO GRAND SUMMARY					

## GRAND SUMMARY

### Signature & Stamp

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 7
ITEM NO	DESCRIPTION	UNITS	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
	<b>DAYWORKS</b>				
	<b>LABOUR</b>				
	All items for labour must be priced. Only				
	the actual time engaged upon the work will				
	be paid for. NOTE; The rate inserted herein				
	shall include all costs of labour as well as				
	overtime, travelling, time and cost of				
	accommodation, social security, contributions,				
	use and maintenance of small tools of trade,				
	supervision, insurance, overheads, profits				
	and any other cost allowance.				
A	Unskilled Labour	Hrs	8		
B	Carpenter/ stone mason	Hrs	8		
C	Foreman having Ordinary Diploma (OD)	Hrs	8		
	and at least 5 years experience				
D	Surveyor having Ordinary Diploma (OD)	Hrs	8		
	and at least 5 years experience				
	<b>MATERIALS</b>				
	All materials should comply with the				
	specification. The rates inserted herein are				
	to include for delivery to site, storage,				
	handling, overheads and profit				
E	3.0m high heavy duty galvanized chain-link; <b>Gauge 9 (3.5 mm diameter)</b> ; 50x50mm mesh onto precast concrete posts (m/s); fastening with 5 No. lines of galvanized wire (m/s); threaded through and including mesh and hook bolts; secured by binding wire; all as per detail drawings.	M	100		
F	Ordinary Portland Cement	Tonne	1		
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					

TITLE: PROPOSED CONSTRUCTION OF GATE HOUSE, WASHROOMS AND FENCING AT BANISA AIRSTRIP					BILL No. 7
ITEM NO	DESCRIPTION	UNITS	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
G	Aggregates for Concrete				
H	a) Sand	m3	1		
	b) Coarse aggregate (12mm)	m3	1		
	c) Coarse aggregate (20mm)	m3	1		
	d) 14/20mm	m3	1		
I	Building Stone	Tonne	1		
J	Natural Sub-Base Standard Gravel	m3	1		
	(Minimum CBR- 30%)				
K	<b>PLANT &amp; EQUIPMENT</b>				
	Where items of major plant listed in the				
	schedule of Day works are specified by type				
	(e.g. Cat D7, Cat 120H) the power rating of				
	such plant is that manufactured within the				
	two years prior to the date of tender. Any				
	plant employed upon day works which have				
	power rating lower than that stated above				
	shall be paid for at rates lower than those				
	schedule of day works. The deduction in				
	the payable rates shall be in proportion to				
	the power rating below the specified above				
	plant.				
L	Cat 140H motor grader or equivalent	Hr	8		
	complete with scarifier.				
M	Hand propelled vibrating roller.	Hr	8		
M	15 tonne tipper lorry.	Hr	8		
O	10 tonne tipper lorry.	Hr	8		
P	Concrete mixer 0.3 - 0.7 m3/min.	Hr	8		
Q	Concrete vibrator (poker type).	Hrs	8		
R	Self-propelled water tanker 6,000-10,000	Hrs	8		
	litre minimum capacity with pick-up .pump.				
<b>TOTAL CARRIED FORWARD TO BILL COLLECTION SHEET</b>					