



<u>PRELIMINARIES</u>		Shs.
<u>PRELIMINARY PARTICULARS</u>		
A	<u>NAME OF PARTIES</u>	
	The "Employer" is : Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00100 <u>NAIROBI</u>	
	The term "Employer" and "Kenya Power" and "Kenya Power & Lighting Co. Ltd" wherever	
	The "Project Manager" is : The Manager, Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u>	
	The "Project Officer " is : The Kenya Power Projects Officer Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u>	
	The "Project Quantity Surveyor" is The Kenya Power Quantity Surveyor, Administration & Property, HR& Administration Kenya Power & Lighting Co. Ltd P.O. Box 30099 - 00101 <u>NAIROBI</u>	
B	<u>DESCRIPTION OF SITE</u>	
	Ruiru Go- Down is in a company owned land at Ruiru 25km from Nairobi CBD, Nairobi county. The site is accessible via Thika Superhighway Right side of the highway off Ruiru stage. All access roads are tarmacked.	
	The Contractor shall visit the Site to acquaint himself with its nature and position, the nature of the ground, substrata and other local conditions, position of power and water supplies, access roads or any other limitations, and no claims for extras will be considered on account of lack of knowledge in this respect.	
	The Contractor must obtain the Project Manager's approval and directions regarding the use of any materials found on the site.	
C	<u>ACCESS TO SITE</u>	
	Access to site shall be as directed by the Project Manager. The Contractor shall strictly observe police & NTSA regulations regarding traffic movement.	
	Preliminaries	Carried to collection KShs.

A WORKING AND STORAGE SPACE

Working and storage space will be confined to the area designated by the Project Manager within the site.

B WORKING HOURS

The Work must be carried out to cause the minimum inconvenience to the occupants of the adjoining premises. In particular, no hammering, mechanical drilling or other unduly noisy work may be commenced before 8.00 a.m. or continued after 6.00 p.m. without prior approval of the Project Manager.

C DESCRIPTION OF THE WORKS

The Works comprise of Construction of *Proposed perimeter wall and yard paving at Ruiru Go-down yard.*

Works shall generally consist of :-

- a) Excavations
- b) Concrete works
- c) Masonry works
- d) Timber roof structure and roof works
- e) Hardwood Windows and doors
- f) Mild steel Gates and pedestrian gates
- g) Electrical installations
- h) Finishes - Plaster, Key pointing , floor terrazzo and ceiling finish.
- i) Concrete paving and drainage works.

APPROVAL OF THE DRAWINGS

The contract will provide and facilitate approval of the drawings by necessary county government and other legal Authorities .

The Contractor shall furnish 3 sets of dully approved drawing within the first two weeks of site take over and before work commences to the Project Manager. A copy of such approved set of drawing shall be kept on site at all times during the contract period.

Preliminaries

Carried to collection

KShs.

		Shs.
<u>GENERAL MATTERS</u>		
<u>SUFFICIENCY OF TENDER</u>		
A	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the Works and of the rates and prices stated in the Priced Bills of Quantities, which rates and prices shall cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the Works.	
B	<u>STAMP CHARGES</u> The Contractor shall allow for the payment of all Stamp Charges in connection with the Surety and Contract Agreement.	
C	<u>DEFINITIONS AND ABBREVIATIONS</u> Terms used in these Bills of Quantities shall be interpreted as follows: "Approved" Shall mean approved by the Project Manager. "as directed" Shall mean as directed by the Project Manager. "B.S." Shall mean the current British Standard specifications published by the British Standards Institution, 2 Park Street, London W.1., England. "CM." Shall mean Cubic Metres. "SM." Shall mean Square Metres. "LM." Shall mean Linear Metres. "MM" Shall mean Millimetres. "KG." Shall mean Kilogramme. "NO." Shall mean Number. "M.S" Shall mean Measured Separately PRS or Prs Shall mean Pairs a.b.d Shall mean as before described Ditto or Do Shall mean the whole of the preceding description except as qualified in the description in which it occurs. NTSA Shall mean National Transport & Safety Authority	
	Preliminaries	Carried to collection KShs.

<p>A</p> <p>B</p> <p>C</p> <p>D</p>	<p><u>PUBLIC AND PRIVATE ROADS, PAVEMENTS, ETC</u></p> <p>The Contractor will be required to make good, at his own expense any damage he may cause to the present road surfaces and pavements within or beyond the boundary of the Site, during the period of the Works. In particular, all existing trees, shrubs, plants. etc., which may be destroyed or damaged during the progress of the Works are to be made good by the Contractor to the approval of the Project Manager.</p> <p><u>POLICE REGULATIONS</u></p> <p>The Contractor is to allow for complying with all instructions and regulations of the police Authorities.</p> <p><u>ENVIRONMENTAL REGULATIONS</u></p> <p>The Contractor shall observe all the requirements of the National Environment Management Authority (NEMA) and especially those conditions given in the Project's Environmental Impact Assessment Report Approved by NEMA. The Contractor shall collaborate with the Environmental Impact Assessment (EIA) expert to ensure that proposed mitigation measures are adhered to during construction phase and where necessary appropriate mending up activities undertaken and the same reported back to NEMA as required.</p> <p>In particular the Contractor shall give special emphasis to control dust. The Contractor shall provide all necessary dust screens to prevent dust from the construction works affecting neighbouring property. The dust screens shall be approved by the Project mgr and be acceptable to NEMA officials. The Contractor shall also control dust on site by appropriate watering of the sources of dust.</p> <p>The Contractor shall put emphasis on controlling noise, vibrations and occupational hazards. The provisions of the Occupational Safety and Health Act No. 15 of 2007 must be strictly observed.</p> <p><u>CONTRACTORS' SUPERINTENDENCE</u></p> <p>The Contractor shall constantly keep on the Works a literate English-speaking Agent or Representative, competent, NCA accredited and experienced in the kind of work involved, who shall give his whole time to the superintendence of the Works. Such Agent or Representative shall receive on behalf of the Contractor, directions and instructions from the Project Manager and such directions and instructions shall be deemed given to the Contractor in accordance with the conditions of the Contract. The Agent shall not be replaced without the specific approval of the Project Manager.</p> <p>It is to be a specific condition of this Contract that the successful Tenderer shall provide on Site throughout the period of construction until the Date for Practical completion a suitably qualified, experienced and competent person to ensure that the works are carried out to the standard required by the specification and detailed on the Drawings; and shall ensure that upon any termination of employment a suitable replacement is found.</p> <p>Such site superrintendent shall have a National Construction Authority's accreditation</p>	<p>Shs.</p>
	<p>Preliminaries</p> <p>Carried to collection</p> <p>KShs.</p>	

		Shs.
A	<p><u>PROTECTIVE CLOTHING</u></p> <p>The Contractor shall provide all protective or any other special clothing or equipment for his employees that may be necessary.</p> <p>This shall include, inter-alia, safety helmets, gloves, goggles, earmuffs, gumboots, overalls, etc., according to the type of work. The Contractor shall ensure that safety helmets are worn by all staff at all times.</p>	
B	<p><u>PROVISIONAL SUMS</u></p> <p>The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A Item A7(i) of the Standard Method of measurements</p> <p>Such sums are net and no addition shall be made to them for profit.</p>	
C	<p><u>ADJUSTMENT OF PROVISIONAL SUMS</u></p> <p>In the final account all provisional sums shall be deducted and the value of the work properly executed in respect of them upon the Project Manager's order added to the contract sum. Such work shall be valued as described for variations in variation clause of the conditions of contract, but should any articles for the work be executed by a Nominated Sub-Contractor, or any articles for the work be supplied by a Nominated Supplier, the Value of such work or articles shall be treated as a P.C. sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.</p>	
D	<p><u>PRIME COST (OR P.C.) SUMS</u></p> <p>The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(ii) of the Standard Method of Measurements</p> <p>Persons or firms Nominated to execute the work or to provide and fix materials or goods as stated in the Conditions of Contract are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described as Nominated suppliers.</p>	
E	<p><u>ADJUSTMENT OF P.C. SUMS</u></p> <p>In the final account all P.C. sums shall be deducted and the amount properly expended upon the Project Manager's order in respect of each of them added to the contract sum. The Contractor shall produce to the Project Manager such quotation, invoices or bills properly receipted as may be necessary to show the actual details of the sums paid by the contractor.</p> <p>Items of profit upon P.C. sums shall be adjusted in the final account prorata to the amount paid.</p> <p>Items of Attendance following P.C. Sums shall be adjusted prorata to the physical extent of the work executed (not prorata to the amount paid) and this shall apply though the Contractor's Bills shows a percentage in the rate column in respect of them.</p> <p>Should the Contractor be permitted to tender and his tender be accepted for any work which a P.C. sum is included in these Bills of Quantities, profit and attendance will be allowed at the same rate as it would if the work were executed by a Nominated Sub-Contractor.</p>	
	<p>Preliminaries Carried to collection. KShs.</p>	



		Shs.	
<p><u>MATERIALS AND WORKMANSHIP</u></p> <p>A <u>GENERALLY</u></p> <p>All materials shall be new unless otherwise directed or permitted by the Project Manager and in all cases where the quality of goods or materials is not described or otherwise specified, is to be the best quality obtainable in the ordinary meaning of the word "best" and not merely a trade signification of that word.</p> <p>All materials and workmanship shall, unless otherwise specified or described, conform to the appropriate British Standard Institution specification current at the date of tender.</p> <p>The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that such materials are on Site when required for use in the Works.</p> <p>The Contractor shall be responsible for and shall replace or make good at his own expense any materials lost or damaged.</p> <p>The Works throughout shall be executed by skilled workmen well versed in their respective trades.</p> <p>B <u>REJECTED WORKMANSHIP OR MATERIALS</u></p> <p>Any workmanship or materials not complying with the specific requirements or approved samples or which have been damaged, contaminated or have deteriorated, must immediately be removed from the Site and replaced at the Contractor's expense, as required.</p> <p>C <u>PROPRIETARY MATERIALS</u></p> <p>Where proprietary materials are specified herein-after the contractor may propose the use of materials of other manufacturer but equal quality for approval by the Project Manager.</p> <p>All materials and goods, where specified to be obtained from a particular manufacturer or supplier are to be used or fixed strictly in accordance with their instructions.</p> <p>D <u>SAMPLES</u></p> <p>The Contractor shall furnish within the first one week of site take over and before work commences and at his own cost, any samples of materials or workmanship that may be called for by the Project Manager for his approval or rejection, and any further samples in case of rejection until such samples are approved by the Project Manager and such samples, when approved, shall be the minimum standard for the work to which they apply.</p>			
Preliminaries	Carried to collection	KShs.	

<p>SAMPLES (Continued)</p> <p>The sample of natural stones shall be of approved crushing strength. G. 26 IT5 profile roofing sheet, 8mm thick Granitto floor tiles size 600x600mm and specified steel section roofing members shall be required and available for quick reference during the entire period of the contract. The approved samples shall be mounted / applied using the correct methodology, edging and finish as per the bill of quantities; all to reflect the high quality workmanship that will be replicated on the permanent works.</p>	<p>Shs.</p>
<p>Preliminaries</p> <p>Carried to collection</p> <p>KShs.</p>	

			Shs.
<u>TEMPORARY WORKS</u>			
A	<u>OFFICE AND SHEDS</u> The Contractor shall erect and maintain temporary office accommodation for his own use, and ample temporary watertight sheds for the proper storage and protection of materials and for the use of artisans and remove when ordered. Floors of sheds shall be at least 150mm above ground level.		
Preliminaries	Carried to collection	KShs.	

	Shs.
<p>A <u>PLANT, TOOLS AND SCAFFOLDING</u></p> <p>The Contractor shall provide all necessary hoists, tackle, plant, vehicles, tools and appliances of every description for the due and satisfactory completion of the Works and shall remove same on completion.</p> <p>The Contractor shall provide, erect and maintain all temporary scaffolding, sufficiently strong and efficient for the due performance of the Works, including Sub-Contract works, provide special scaffolding as and when required during the Works and remove on completion and make good.</p> <p>Such scaffolding shall be constructed of tubular steel or timber of sufficient scantlings and be provided with planked footways and guard-rails to approval.</p> <p>All such plant, tools and scaffolding shall comply with all regulations whether general or local, in force throughout the period of the contract and shall be altered or adapted during the Contract as may be necessary to comply with any amendments in or additions to such regulations.</p> <p>Scaffolding is not measured hereinafter, and the Contractor must allow here</p>	
<p>B <u>EXISTING AND ADJACENT PROPERTY</u></p> <p>The Contractor must take all steps necessary to safeguard existing and adjacent property, make good at his own expense any damage to persons or property caused thereon, and hold the Employer indemnified against any such claim arising.</p> <p>The Contractor will be held fully responsible for the safety of the existing and adjacent buildings and for any damage caused in consequence of these Works. He must reinstate all damage at his own expense and indemnify the Employer against any loss.</p> <p>The Contractor must take such steps and exercise such care and diligence as to minimise nuisance from dust, noise or any other cause to the occupiers of the existing and adjacent property.</p>	
<p>C <u>LABOUR CAMPS</u></p> <p>No labour camps, with the exception of watchmen may be housed on the site and the Contractor shall allow for all transport and other charges in moving labour to and from site at such hours and by such routes as are permitted by the Authorities.</p> <p>The Contractor shall provide, erect and maintain satisfactory housing for the watchmen and shall remove same on completion of the works.</p> <p>Preliminaries Carried to collection KShs.</p>	

<p>A</p> <p>B</p> <p>C</p> <p>D</p>	<p><u>HOARDING</u></p> <p>The Contractor shall enclose the Site either wholly or in parts with a hoarding 2.40 metres high with openings and gates as required, constructed of substantial timbers to approval and covered with new Galvanised iron corrugated sheeting painted to approval.</p> <p><u>TEMPORARY ROADS</u></p> <p>The Contractor shall provide where directed all temporary access roads, tracks and paths necessary for the execution of the Works, including making good when no longer in use.</p> <p><u>SIGNBOARD</u></p> <p>The Signboard and lettering on same for the display of the General and Sub-Contractor's names shall be of an approved size with the Employer's name painted thereon. The Project Manager's name shall be printed in letters not exceeding 100mm in height all to the Project Manager's design. No other signboard or advertising will be permitted.</p> <p><u>NOMINATED SUB-CONTRACTORS AND SUPPLIERS</u></p> <p><u>NOMINATED SUB-CONTRACTORS</u></p> <p>The Contractor shall be responsible for Nominated Sub-Contractors in every respect and in particular it shall be the Contractor's responsibility to ensure that each Sub-Contractor commences and completes the work in such manner and is ready on the Site with his materials, labour and special plant at such times so as to conform with the progress Schedule, as specified previously, and so ensure satisfactory progress.</p> <p>The Contractor shall also accept liability for and bear the cost of General Attendance on Nominated Sub-Contractors which shall be deemed to include for:</p>	<p>Shs.</p>
	<p>Preliminaries</p> <p>Carried to collection</p> <p>KShs.</p>	

		Shs.	
<p><u>NOMINATED SUB-CONTRACTORS - CONTINUED</u></p> <p>Allowing the use of standing scaffolding, maintenance and alteration of all scaffolding, retention of all scaffolding until such time as all relevant Sub-Contractors' works are complete and removal of all scaffolding on completion. Providing space for office accommodation, and for storage of plant and materials; allowing use of sanitary accommodation; the supply of all necessary water, and lighting; and clearing away all rubbish.</p> <p>The items for "General Attendance" given herein-after following P.C. Sums in respect of Sub-Contractors' work shall be deemed to include all the above.</p> <p>The Contractor shall also accept liability for and bear the cost of Special Attendance on Nominated Sub-Contractors which shall include for one or more of the following:</p> <p>Unloading, storing, hoisting, placing in position, providing power, provision of special scaffolding.</p> <p>The items of "Special Attendance" given herein-after following P.C. Sums shall include any one or more of the above items as set out in the particular reference.</p> <p>Cutting away for and making good after the work of Sub-Contractors as may be required will be measured and valued separately by the Surveyor.</p>			
A	<p><u>NOMINATED SUPPLIERS</u></p> <p>The cost of "Fix only" materials to be obtained from Nominated Suppliers which are covered by prime Cost or Provisional Sums shall include for taking delivery where directed, checking with invoices or indents, reporting and claiming damages for shortages and damaged goods, defraying demurrage signing for as having been received in good order, transporting, unloading, storing, covering and protecting until the time of fixing, unpacking, replacing anything lost or damaged, sorting, assembling, hoisting to required levels and fixing as described.</p> <p>Before placing any orders with Nominated Sub-Contractors or Nominated Suppliers the Contractors must ascertain that the terms and conditions of the quotations and the dates of delivery of materials or execution of works comply with the terms of Contract and the Progress Schedule.</p>		
B	<p><u>PRIME COST RATES</u></p> <p>Where description of items include a P.C. rate per unit this rate is to cover the nett supply of the unit only. The Contractor's price must include for the cost of the unit at the rate stated, plus waste, taking delivery, storage, fixing in position, profit and overheads.</p> <p>The actual nett cost per unit will be adjusted within the Final Account</p>		
	Preliminaries	Carried to collection	
		KShs.	



COLLECTION

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PRELIMINARIES

TO GRAND SUMMARY
AT END OF BILLS

KSHS.



BILL NO. II- BUILDER'S WORKS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	RUIRU GO-DOWN PERIMETER WALL				
	<u>SUBSTRUCTURES-(ALL PROVISIONAL)</u>				
	<u>Site clearance</u>				
A	Clearing the site off grass, shrubs and all vegetation and the like; cart away as directed; to approved site.	650	SM		
B	Carefully remove existing chainlink fencing with and including 150x150mm cranked concrete post @ av. 3000mm cc, 3 no. barbed wire strands. Overall 2700mm high	520	LM		
C	Carefully remove existing m/s grill gate in 12mm diameter steel grill work, fabric mesh, 25x25mm SHS; complete with pedestrian gate, rail track, spikes and 2no. columns ; overall gate size 5000x2400mm high, handover to the client and cart away arising debris	3	NO		
	<u>Excavations</u>				
E	Excavate oversite to remove top vegetable soil average 250mm deep and spread as directed on site.	650	SM		
F	Excavate for foundation strip footing in normal soil not exceeding depth 1.50m deep.	380	CM		
G	Ditto column pits 0-1.5M deep	576	CM		
H	Ditto over 1.5m but n.e 3m deep	23	CM		
J	Return fill and ram selected excavated material around foundations.	686	CM		
K	Load, wheel and cart away from site surplus excavated material and deposit in approved dumping area.	294	CM		
	<i>Total Carried to collection</i>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Extra over all kinds of excavation for excavating in rock irrespective of class.	383	CM		
B	Allow for keeping excavations free from all water by pumping or otherwise.		ITEM		
C	Ditto; for plunking and strutting to sides of excavations. Concrete Works 50 mm plain concrete (1:4:8 - class x) blinding in :		ITEM		
D	Strip footing	390	SM		
E	Ditto collumn bases Vibrated Reinforced Concrete class 1:2:4 20/20mm in;	585	SM		
F	Strip footing	83	CM		
G	Column bases	84	CM		
H	Columns	45	CM		
J	Ground beams	77	CM		
	<u>Sawn formwork to :</u>				
K	Sides of strip footing	180	SM		
L	Sides of column bases	465	SM		
M	Sides of sub columns	599	SM		
N	Sides of ground beams	516	SM		
P	Sides of floor bed 75-150mm high	55	LM		
	<u>Foundation walling.</u>				
Q	200 mm thick natural stone walling; roughly dressed; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses	1,238	SM		
	Total Carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Labour and material for construction joints in 12mm thick flexel expansion and 25x25mm expansion sealer at every 20m in 250mm wide columns	62	LM		
B	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar <u>Weep Holes</u>	650	LM		
C	Allow for creating 100mm diameter weep holes at ground level at averaging 2m centres on masonry wall and prevent ingress using fabric mesh in double offset layers; grouted in <u>Reinforcement</u> <u>High tensile ribbed bars BS 4461 as described in :</u>	300	NO		
D	Assorted reinforcement	25,957	Kgs		
E	BRC mesh wire type A142 (200x200x 6mm thick) <u>In situ Finishings</u>	60	SM		
F	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork <u>Painting and Decorations</u> <u>Prepare and apply three coats bituminous paint to:</u>	195	SM		
G	Wood floated rendered plinths over 300mm girth	195	sm		
<i>Total Carried to collection</i>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>COLLECTION</u>				
A	From page 1				
B	From page 2				
C	From page 3				
<i>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</i>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUPERSTRUCTURE WORKS</u>				
	<u>Superstructure walling</u>				
A	200 mm thick machine cut walling; bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at every course	1,625	SM		
B	Labour and material for construction joints in 12mm thick flexel expansion and 25x25mm expansion sealer at every 15m in approx 200mm wide columns	123	LM		
C	Extra-over for pointing & keying in recessed horizontal and flush vertical joints in 2 coats black bituminous paint to recessed joints	1,625	SM		
	<u>In situ Finishings</u>				
D	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork as directed as base to walls; external	1625	sm		
	<u>Painting and Decorations</u>				
	<u>Prepare and apply three coats exterior quality paint to "crown Barger" or equal and approved to:</u>				
E	Wood floated rendered plinths over 300mm girth	1625	sm		
	<u>Vibrated reinforced insitu concrete class 20/(20mm) as described in:-</u>				
F	Columns	135	CM		
G	Beams	0	CM		
	<i>Total Carried to collection</i>				0

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Reinforcement (Provisional)				
	<u>Supply and fix bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as deccribed</u>				
A	Assorted diameters	12,150	Kgs		
	<u>Sawn formwork to:</u>				
B	Sides of column	520	SM		
C	Sides and soffittes of beams	0	SM		
	Sentry box				
D	Supply and fit in position cel cured cypress timber framed timber walled sentry box complete with an open front in which a sentry or person on guard duty may stand to be sheltered complete with locable door; averaging n.e 2.5 Sq. M of floor area; iron sheet roof covering; and wndow opening all to approval (all timber to be cel-cured, varnished and painted as necessary)	3	No		
	Gate				
E	Fabricate and fix branded double-leaf gate overall size 6000x2400mm high in RHS framing size 50x25x3mm thick and G16 M.S. plate panel infills; hung at three points both sides in metal lugs built in 150x150x10mm RHS columns including 900x1900mm pedestrian gate 'padbolts,towerbolts and means of securing as necessary, steel wheel av. 40mm dia and a quadrant steel track at 3000mm radius both leaves; and apply two coats red oxide primer 'before fixing and two coats of gloss oil paint as "Crown Berger" or any other equal and approved to the pm's approval and satisfaction	3	No		
	Total Carried to collection				

Zen

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Stone facing				
A	125x50x av. 25mm thick clay brick facing or any other equal and approved stone facing with and including c/s backing, jointing in cement :sand (1:3) to column faces	195	SM		
	Copings				
B	Provide and joint in cement :sand (1:3) 300 mm wide precast concrete coping weathered to double fall and throated on two sides coping to wall	598	LM		
C	Provide and joint in cement :sand (1.3) 500 x 500 mm precast concrete coping weathered to four falls and throated on all sides to pier	260	NO		
	Razor wire				
D	Supply and fix razor wire along perimeter wall and/or as directed on site in two layers conforming to the following minimum specifications:- Coil size 750mm diameter, blade profile- ripper razor wire, stretch factor - max. 10m per coil and secured with and including 40x40x3mm thick x 450mm long angle iron welded on 100x100x4mm steel plates inserts at 1m cc (galvanized) all to manufacturers instructions	650	LM		
Total carried to collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<i>COLLECTION PAGE</i>					
A	Brought forward from page 4				
B	Brought forward from page 5				
C	Brought forward from page 6				
D	Brought forward from page 7				
<i>TOTAL FOR PERIMETER WALLING CARRIED TO SUMMARY</i>					

Ban

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
Yard Paving;					
A	Excavate mechanically the yard area; in marshy ground; commencing existing ground level but not exceeding 1.5M deep average and cart away surplus excavated materials; allowing for removal of all water	1,350	CM		
B	Imported red soil filling in 150mm layers; rammed mechanically and watered as necessary	945	CM		
C	Approved hardcore filling to make up levels in layers not exceeding 250mm deep and rammed mechanically as necessary with a 10ton roller; all to approval	405	CM		
D	50mm thick approved murrum blinding to hardcore surfaces ditto	900	SM		
E	BRC fabric mesh reinforcement No. A142 to blinded surfaces of fill	900	SM		
F	150mm thick VRC (class 20) bed in bays not exceeding 25 square metres including formwork and flexel material in expansion joints and approved tempered finish	900	SM		
TOTAL FOR PAVING WORKS CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>DRAINAGE WORKS</u>				
A	Remove existing drainage Precast concrete channels to replace with insitu culverts of 6m long. MS .	1	ITEM		
B	Excavate trench for surface water drainage av. Depth 750mm and cart away excavated materials from site.	23	CM		
C	Insitu concrete class 20/20 (1:2:4) in 150mm thick Concrete sides and base of channel (U-shaped) including all necessary formwork	68	SM		
D	Allow for the construction of an insitu road culvert size 6000mm long x 450mm dia complete with headwall drainage all in VRC class 20/20 (1:2:4) concrete surround ; all necessary formworks and the like	1	NO		
	<u>Supply and fix ribbed bars Reinforcement including bending ,hooks,tying wire,cutting spacersand supporting all in position as decribed</u>				
E	Assorted diameters	6,750	KG		
F	BRC mesh wire type A142 (200x200x 6mm thick)	30	SM		
	<u>Fabricate and fix following Mild steel gratings made of 16mm dia. ribbed steel bars at 150mm c/c both directions including fixing to drainage culverts , pinning and pinning lugs to concrete or blockwork and bedding frame in cement and sand mortar(1:4)and apply two coats red oxide primer first grade.</u>				
G	900x900mm	3	No		
H	750x750mm	3	No		
TOTAL FOR DRAINAGE WORKS CARRIED TO SUMMARY					

BILL NO. II SUMMARY				
ELEMENT NO.	TITLE		PAGE NO.	KSHS.
1	PERIMETER WALLING		8	
2	YARD PAVING WORKS		9	
3	DRAINAGE WORKS		10	
TOTAL FOR WORKS CARRIED TO GRAND SUMMARY				

Beu

**PROPOSED CONSTRUCTION OF RUIRU GODOWN PERIMETER WALL, YARD PAVING
AND DRAINAGE WORKS**

GRAND SUMMARY

BILL NO.	DESCRIPTION	PAGE NO.	OFFICIAL USE	CONTRACTOR'S USE
			K.SHS.	K.SHS.
1	Preliminaries	P / 15		
2	Builder's works	Page 11 of 11		
	SUB-TOTAL 1			
	Add: VAT 16%			
	GRAND TOTAL CARRIED TO FORM OF TENDER (KSHS.)			

Tendrere's Name:

Sign. & Stamp:

Date:

Witness Name:

Sign.:

Date:

