	BILL OF QUANTITIES FOR REHABILITATION &				
	SUBSTATION BALASTING LOT-2 COAST				
ITEM	DESCRIPTION	UNIT	OTY	UNIT	AMOUNT
NO.	5_55 7 m 116.1	O 1 1	~		, S S
7101	Preliminaries-For All substation sites in the Lot				
Α	Allow for a temporary site office prefarably portable that can	ITEM	1		
	be shifted to multiple site or external arrangement as per				
	contractor convinience(Works lasting only 4 months)				
В	Ditto but provide at his own risk and cost where directed on	ITEM	1		
	the site weatherproof lockup sheds for the safe storage and	COAST ON UNIT QTY UNIT AMOUNT RATE Sin the Lot farably portable that can all arrangement as per gonly 4 months) I cost where directed on for the safe storage and and for the use of workmen such sheds and make es upon completion to the ITEM 1 ITE			
	custody of material for the Works and for the use of workmen				
	engaged thereon and shall remove such sheds and make				
	good damaged or disrupted surfaces upon completion to the				
	satisfaction of the Project Manager.				
С	Allow for clean water for the works	ITEM	1		
D	Allow for all the necessary statutory approvals for the works	ITEM	1		
E	Allow for temporary sign post for the proposed works	ITEM	1		
F	The Contractor shall allow and be entirely responsible for the	ITEM	1		
	security of all the Works, stores, materials, plant, personnel,				
	etc, both his own and sub-contractors' and must provide all				
	necessary watching, lighting and other precautions as				
	necessary to ensure security against theft, loss or damage				
	and the protection of the public.				
G	Allow for Insurance Cover for the proposed works and				
	workers.				
Н	Allow for a qualified personel conservant with Kenya Power	ITEM	1		
	safety regulations for the entire contract period				
J	Allow for supply of power or provide for an adequate Capacity	ITEM	1		
	Generator on site for the supply of power and water for use				
	for the works				
K	Allow for demobilization and relocation to different site	ITEM	1		
<u> </u>	Allow for a small of the single state of the	ITE NA			
L	Allow for samples testing in accedited labaratories all material	IIEW	1		
	as per engineer request				
	n on				
	TOTAL TO SUMMARY PAGE 1				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.				RATE	
	KOKOTONI 133KV METERING SUBSTATION				
1	Excavate oversite vegetable soil /existing ballast average	SM	1600		
	depth 150mm and cart way to Municipal Council designated				
	damping site				
2	Average 0.2mm thick selected well compacted imported and	CM	320		
	approved murram fill, compacted in layers of 150mm thick				
	using a plate compactor to receive ballast to gradual slope				
	terminating at srorm drain				
3	Apply suitable and approved weed killer, herbicide to	SM	1600		
	surfaces of backfill as per the Manufacture's written				
	instructions and a 12 month guarrantee and provide a copy				
	to client.				
4	1000 gauge polythene or other equal and approved	SM	1600		
	mebrane laid on compacted and treated surface with welted				
	laps of 200mm wide.				
5	Supply and spread uniformly 150mm thick (30-40mm) crushed	Tons	180		
	Agregates/ ballast in switchyard. (machine crushed)				
6	Provide 150mm precast concrete or insitu channe 250mm	LM	200		
	above switchyard level along the edges of invert drain				
	block,road edges to secure from falling ballast.				
7	Allow cleaning and re use of existing ballast to appointed	SM	1600		
	areas in the yard				
	CABLE TRENCHES & DUCTS				
1	Refurbish existig cable trenches by hacking 150mm tongue	LM	70		
	and grrove and extension to 300mm above ground by lean				
	concrete on the 150mm walls- Provisional length				
2	Provide and put in place (900x300x70mm) thick precast	NO	175		
	concrete trench covers reinfoced with Y8 bars spaced at				
	100mm both ways with fair face finish on both side; concrete				
	to class 20				
3	Refurbish existing chainlink where ddeilapilated by replacing	ITEM	1		
	broken poles ,struts ,allow for betetr tensioning and coating				
	poles with slurry to make good				
	CONTORL BUILDING	CN4	150		
1	ALLOW for External and internal painting control building	SM	150		
	including making good spash aprons and skirting with black				
	bituminous				
	TOTAL TO SUMMARY PAGE 1				
	TOTAL TO SUIVIIVIANT FAGE 1				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.	BESSIAI TION	01111	Q.I.	RATE	7111100111
140.				TOTTE	
2	Allow replacement of doors and priming,painting with 2 coats	ITEM	1		
	existing, and reapir to functionality all lighting, fixtures , remove				
	all rusted metal parts ,Splash aprons ,all builders work to				
	make good Provisional 200,000				
3	Supply and lay 110mm diameter class 41 UPVC ducts to	LM	60		
	receive control cables running on the surface; and crossing				
	the access road, including excavation of trench, backfilling				
	and 100mm thick hounching on ducts sorrounds.				
4	allow for checker plates 600mm wide for 600mm cable trench	LM	25		
_	complete with colapsible handles .allow for nosing angle	LIVI	25		
	edge protector.				
5	Allow painting with cement slurry existing switchgear plinths	ITEM	1		
6	Allow for perimeter wall refurbishment with bagwash and gate	ITEM	1		
	repair and painting -wall 200lm		'		
7	Allow for IDB 300mm dia drain on one side complete with	LM	100		
,	side slabs and all works and include chanelling all storm water		100		
	_				
8	to drain and exit	ITEM	1		
0	Allow for general clearance of vegetation ,shrubs and the like	I I E IVI	ı		
9	Alow entry Road potion by cart away unsuitable and roll	SM	300		
	compact and do 150mm well graded maruum and 50mm	OW	000		
	quarry chips surfacing,kerbs,channels,compaction to std.				
	quarry critips surfacility, kerbs, criarriess, compaction to stu.				
	TOTAL TO SUMMARY PAGE 2				
	TOTAL TO COMMUNICATINGLE				
	SUMMAY PAGE			AN	MOUNT
	TOTAL FROM PAGE -PRELIMINARIES ALL LOTS				
	TOTAL FROM PAGE 1				
	TOTAL FROM PAGE 2				
	SUB-TOTAL SRM KOKOTONI 132KV METERING				
	W W				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.				RATE	
	MOMBASA CEMENT 133KV METERING SUBSTATION				
	<u>SWITCHYARD</u>				
1	Excavate oversite vegetable soil /existing ballast average	SM	2400		
	depth 150mm and cart way to Municipal Council designated				
	damping site				
2	Average 150mm thick selected well compacted imported and	CM	360		
	approved murram fill, compacted in layers of 150mm thick				
	using a plate compactor to receive ballast to gradual slope				
	terminating at srorm drain				
3	Apply suitable and approved weed killer, herbicide to	SM	2400		
	surfaces of backfill as per the Manufacture's written				
	instructions and a 12 month guarrantee and provide a copy				
	to client.				
4	1000 gauge polythene or other equal and approved	SM	2000		
	mebrane laid on compacted and treated surface with welted				
	laps of 200mm wide.				
5	Supply and spread uniformly 150mm thick (30-40mm) crushed	Tons	300		
	Agregates/ ballast in switchyard. (machine crushed)-top up				
	with existing and funrish client with weighbill tickets				
6	Provide 150mm precast concrete or insitu channe 250mm	LM	200		
	above switchyard level along the edges of invert drain				
	block,road edges to secure from falling ballast.				
7	Allow cleaning and re use of existing ballast to appointed	ITEM	1		
	areas in the yard				
	CABLE TRENCHES & DUCTS				
1	Provide and put in place (900x300x70mm) thick precast	NO	50		
	concrete trench covers reinfoced with Y8 bars spaced at				
	100mm both ways with fair face finish on both side; concrete				
	to class 20				
2	Make good entry Road potion by cart away unsuitable and	SM	300		
	roll compact and do 150mm well graded maruum and 50mm				
	quarry chips surfacing,kerbs,channels,compaction to std.				
	REFURBISHMENTS				
1	ALLOW for internal painting control building including	SM	200		
	making good spash aprons and skirting with black				
	bituminous				
2	allow for checker plates 600mm wide for 600mm cable trench	LM	20		
	complete with colapsible handles .allow for nosing angle				
	edge protector.				
	TOTAL TO SUMMARY PAGE 1				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.				RATE	
3	Allow painting with cement slurry existing switchgear plinths	ITEM	1		
4	Supply and lay 110mm diameter class 41 UPVC ducts to	LM	60		
	receive control cables running on the surface; and crossing				
	the access road, including excavation of trench, backfilling				
	and 100mm thick hounching on ducts sorrounds.				
5	AllowPainting/ replacement of doors/steel grills and	ITEM	1		
	priming,painting with 2 coats existing,and reapir to				
	functionality all lighting repairs and maintainance				
67	Mke good by painting internal surface of wall including the	SM	450		
	masonary repairs				
8	Rehabilitate the .existing gates by making good all areas that	ITEM	1		
	need repair, repaint all to client satisfactory.				
9	Provide concrete insitu channel 200mm x125 to switchyard	LM	200		
	level along the edges of invert drain block,road edge and				
	chainlink to secure from falling ballast.				
10	Allow for combined Laser jet printer ,scanner, up to A3 to be	ITEM	1		
	used in the entire project for Client project managers office				
	use. Allow 140,000				
11	Allow for IDB 300mm dia drain on one side complete with	LM	100		
	side slabs and all works and include chanelling all storm water				
	to drain and exit				
12	Allow for general clearance of vegetation ,shrubs and the like	ITEM	1		
	TOTAL TO SUMMARY PAGE 2				
	TOTAL FROM PAGE 1				
	TOTAL FROM PAGE 1				
	TOTAL TROWT AGE 2				
	SUB-TOTAL MOMBASA CEMENT METERING STATION			-	
	, n				
	Con which				

	RABAI 132/ 33 KV SUBSTATION				
ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.				RATE	
	SWITCHYARD				
1	Excavate oversite vegetable soil average depth 150mm and	SM	2300		
	cart way to Municipal Council designated damping site			RATE	
2	ALLow for oversite removal By scooping existing ballast and	ITEM	1		
	cart way to Municipal Council designated damping site 2 ALLow for oversite removal By scooping existing ballast and and clean and stock in piles 3 Average 0.2mm thick selected well compacted imported and approved murram fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at srorm drain 4 Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarrantee and provide a copy to client. 5 1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide. 6 Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed) 7 Provide 150mm precast concrete or CAST insitu channe 300mm above switchyard level along the edges of invert drain block, road edges etc to secure from falling ballast. CABLE TRENCHES & DUCTS 1 Refurbish existig cable trenches by hacking 150mm tongue and grove and extension to 300mm above ground by lean concrete on the 150mm walls- Provisional length				
3	Average 0.2mm thick selected well compacted imported and	CM	450		
	approved murram fill, compacted in layers of 150mm thick				
	using a plate compactor to receive ballast to gradual slope				
	terminating at srorm drain				
4	Apply suitable and approved weed killer, herbicide to	SM	2300		
	surfaces of backfill as per the Manufacture's written				
	instructions and a 12 month guarrantee and provide a copy				
	to client.				
5	1000 gauge polythene or other equal and approved	SM 2300	2300		
	mebrane laid on compacted and treated surface with welted				
	laps of 200mm wide.				
6	Supply and spread uniformly 150mm thick (30-40mm) crushed	d Tons 300			
	Agregates/ ballast in switchyard. (machine crushed)				
7	Provide 150mm precast concrete or CAST insitu channe	LM	200		
	300mm above switchyard level along the edges of invert				
	drain block,road edges etc to secure from falling ballast.				
	CABLE TRENCHES & DUCTS				
1	Refurbish existig cable trenches by hacking 150mm tongue	LM	300		
	and grrove and extension to 300mm above ground by lean				
	concrete on the 150mm walls- Provisional length				
2	Provide and put in place (900x300x70mm) thick precast	NO	900		
	concrete trench covers reinfoced with Y8 bars spaced at				
	100mm both ways with fair face finish on both side; concrete				
	to class 20				
3	Allow for repair and reinforce existing access road by	Item	1		
	recompaction and removal of weeds and re pave using				
	existing and paint red yellow in all kerbs and allow				
	replacement of damaged pavings and like aprox 450sqm				
4	cart away and demolish by crushing qall failed cable covers	Item	1		
	and cart away				
5	re-spread uniformly existing 150mm thick (30-40mm) crushed	SM	2300		
	Agregates/ ballast in switchyard. (machine crushed)				
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
	TOTAL TO SUMMARY PAGE 1				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
NO.				RATE	
3	Supply and lay 110mm diameter class 41 UPVC ducts to	LM	120		
	receive control cables running on the surface; and crossing				
	the access road, including excavation of trench, backfilling				
	and 100mm thick hounching on ducts sorrounds.				
4	Rehabilitate transformer plinth and all switchgear plinths with	Item	1		
	brush and slurry coat to make good				
	RABAI 132 KV DIAMETERS YARD				
	<u>SWITCHYARD</u>				
1	ALLow for oversite removal By scooping existing ballast and	SM	21500		
	and clean and stock and re use	ducts to and crossing backfilling backfilling backfilling backfilling backfilling backfilling ballast and conted and conted and ballast and conted and conted and ballast and conted and content cont			
2	RABAI 132 KV DIAMETERS YARD SWITCHYARD ALLow for oversite removal By scooping existing ballast and and clean and stock and re use Excavate oversite vegetable soil/ballast average depth 100mm and cart way to Municipal Council designated damping site Average 0.1m thick selected well compacted imported and approved murram fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at srorm drain Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarrantee and provide a copy to client. 1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide. Re-spread uniformly existing 150mm thick (30-40mm) crushed SM 21500 Supply and spread uniformly (30-40mm) crushed Agregates/ Tons 1700				
	100mm and cart way to Municipal Council designated				
	damping site				
3	Average 0.1m thick selected well compacted imported and	CM	2150		
	approved murram fill, compacted in layers of 150mm thick				
	using a plate compactor to receive ballast to gradual slope				
	terminating at srorm drain				
4	Apply suitable and approved weed killer, herbicide to	SM	21500		
	surfaces of backfill as per the Manufacture's written				
	instructions and a 12 month guarrantee and provide a copy				
	to client.				
5	1000 gauge polythene or other equal and approved	SM	21500		
	mebrane laid on compacted and treated surface with welted				
	laps of 200mm wide.				
6	Re-spread uniformly existing 150mm thick (30-40mm) crushed	SM	21500		
	Agregates/ ballast in switchyard. (machine crushed)				
7	Supply and spread uniformly (30-40mm) crushed Agregates/	Tons	1700		
	ballast in switchyard. (machine crushed) to. Make up low				
	areas				
8	Provide 150mm precast concrete or CAST insitu channe 200-	LM	700		
	mm above switchyard level along the edges of invert drain				
	block,road edges to secure from falling ballast.				
9	cart away and demolish by crushing all failed cable covers	Item	1		
	and cart away				
10	Refurbish existig cable trenches by hacking 150mm and raise	LM	700		
	to 200mm above ground by lean concrete on the 150mm				
	walls and clearing the debris in trenches				
	m n				
	TOTAL TO SUMMARY PAGE 2				

ITEM	DESCRIPTION	UNIT	QTY	UNIT	AMOUNT
	DESCRIPTION	UNIT	QII		AWOUNT
NO.				RATE	
12	Provide and put in place precast concrete trench covers size;	NO	2000		
12	900x300x75mm thick, reinfoced with T8 bars spaced at	110	2000		
	100mm both ways with fair face finish on both side; concrete				
	-				
13	to class 25-to replace all damaged covers Supply and lay 110mm diameter class 41 UPVC ducts to	LM	350		
13	receive control cables running on the surface; and crossing	Livi	330		
	the access road, including excavation of trench, backfilling				
	-				
14	and 100mm thick hounching on ducts sorrounds.				
15	Provide 150mm lean concrete or CAST insitu channe 200mm	LM	600		
13	above switchyard level along the edges edges etc to secure	Livi	000		
	from falling ballast.				
	STORM WATER DRAINAGE				
A	Excavate on site drain trench not exceeding 1.5m deep	CM	700		
'`	including plucking and struting, disposal of soil to receive	0.1.	, 00		
	drainage channels and forming sloping sides in well				
	compacted murram bed.				
В	Lay (300x450mm) precast concrete invert block drains to a	LM	400		
	suitable fall with grooved edge and tounged joints filled with				
	cement/sand mortar (1:3) and laid on 50mm thick plain				
	concrete bed				
С	Supply and lay on sides of sloped trench (75x230mm wide)	LM	800		
	precast concrete slabs jointed in 1:3 cement sand mortar				
D	Fair face plain concrete strip (1:3:6)mix, size; 150x250mm	СМ	30		
	high to on both side of drain including excavation and carting				
	away the excavated materials.				
Е	Allow for directing all storm water to a soakage pit 30 Feet	ITEM	1		
	deep with upper block walling to surface and an RC slab				
	150mm thick with 12mm dia bars at 200centres .allow for all				
	builders work ,ogee connection and the like				
F	Allow for Supervision office print/data and Provide gadgets -	ITEM	1		
	provisional 1,200,000 -Project office and reports facilitation-				
	CIT/PE//PM/PS-for all sites				
	TOTAL TO SUMMARY PAGE 3				
	SUMMARY PAGE				
	TOTAL PAGE 1				
	TOTAL PAGE 2				
	TOTAL PAGE 3				
	M W				
	SUB-TOTAL RABAI 132KV SIDE				

LOT 2 COAST SUMMARY PAGE				
SUB TOTAL SRM KOKOTONI 132 KV METERING				
SUB TOTAL MOMBASA CEMENT 312KV METERING				
SUB TOTAL RABAI 132KV SUBSTATION SIDE				
TOTAL LOT 2 COAST				
ADD 0.03% LEVY				
Allow 16% VAT				
711047 1070 4711				
TOTAL TO FORM OF TENDER LOT 2-COAST				
TOTAL TO FORM OF TENDER LOT 2-COAST				
A				
Amount in words:	······	······		······
Company Stamp				
Signed:				
Name:				
Address:				
Conctract Period:12 MONTHS COMPLY TO DURATION	ON	YES	NO	
		ı		nn
			hr for	
		ı		*
				†
- 		1		†
				+
		1		1
				
				1
				1