



<u>BILL OF QUANTITIES FOR REHABILITATION & SUBSTATION BALASTING LOT-3</u>					
ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
<u>Preliminaries</u>					
1	Allow for a temporary site office preferably portable that can be shifted to multiple site or external arrangement as per contractor convenience (Works lasting only 4 months)	ITEM	1		
2	Allow for clean water for the works	ITEM	1		
3	Allow for all the necessary statutory approvals for the works	ITEM	1		
4	Allow for temporary sign post for the proposed works	ITEM	1		
5	Allow for security and insurance for the proposed works	ITEM	1		
6	Allow for a qualified person conservant with Kenya Power safety regulations for the entire contract period	ITEM	1		
7	Allow communication appliances for project engineer and supervisor. allow provisional 350,000	ITEM	1		
8	Allow for supply of power for the works.	ITEM	1		
<u>LONDIANI 33/11KV SUBSTATION</u>					
<u>SWITCHYARD</u>					
1	Excavate oversite vegetable soil average depth 150mm and cart way to Municipal Council designated dumping site	SM	2000		
2	Allow for oversite removal of vegetation ,clearing all and cart	SM	2000		
3	Average 0.2mm thick selected well compacted imported and approved murrum fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at storm drain	CM	350		
4	Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarantee and provide a copy to client.	SM	2000		
5	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with weltd laps of 200mm wide.	SM	1800		
6	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	1800		
<u>TOTAL TO SUMMARY PAGE</u> 					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	RUAMBWA 33/11KV SUBSTSTION				
	SWITCHYARD				-
1	ALLOW for oversite removal of shrubs bushes ,clearing all vegetation on non live areas within the KPLC premises including oversite vegetable soil average depth 150mm and cart way to Municipal Council designated damping site	SM	1100		
2	Average 0.2mm thick selected well compacted imported and approved murrum fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at sorm drain	CM	250		
3	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.	SM	1100		
4	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	1000		
5	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	1000		
6	Provide 150mm precast concrete or CAST insitu channe 300mm above switchyard level along the edges of invert drain block,road edges to secure from falling ballast.	LM	145		
7	Allow cleaning and re use of existing ballast to appointed areas in the yard	SM	200		
	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	LM	15		
2	Allow for extension of above trench by masonry 600x600	LM	20		
3	Provide and put in place (600x300x70mm) thick precast concrete trench covers reinfoced with Y8 bars spaced at 100mm both ways with fair face finish on both side; concrete to class 20	NO	120		
	TOTAL TO SUMMARY PAGE				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
4	Allow for repair and reinforce existing chainlink-and gates posts,mesh,strands where dilapidated and realign well with new proposed half wall ,all works including either priming all metal posts and tassociated work to make good	Item	145		
STORM WATER DRAINAGE					
1	Excavate on site drain trench not exceeding 1.5m deep including plucking and struting, dispoasl of soil to receive drainage channels and forming sloping sides in well compacted murrum bed.	CM	90		
2	Lay (300x450mm) precast concrete invert block drains to a suitable fall with grooved edge and tounge joints filled with cement/sand mortar (1:3) and laid on 50mm thick plain concrete bed	LM	100		
3	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete slabs jointed in 1:3 cement sand mortar	LM	100		
RETAINING MASONARY WALL 2M-50LM					
Block walling in cement sand mortar (1:3) including and reinforced with 20 SWG hoop iron in every two alternating course.including all bases excavations ,concrete works					
1	200mm thick natural stone wall	SM	200		
2	Ditto but pile pillars	SM	80		
3	Allow class 20 concrete for stips and bases	CM	25		
4	Allow for plaster/finishes,with black bituminous coat.	SM	550		
5	ALLOW for hard compacted 4m(60LM) gravel road on 33/11kv side withj 500mm compacted layers to 95MDD and culvert 600 including all works and headwall/kerbs,chanel and all paintings.finished surface with quarry chips 100mm.	Item	1		
6	Allow for PVC ducts at various locations as directed with bends (10Nos) including all works haunching and the like	LM	60		
REFURBISHMENTS					
1	Fabricate and fix standard primary substation Grill gate 75x75x4mm frame with 50mm diameter 6No.aheavy duty gauge 8 wire mesh, bushess as including excavation for the gate columns, concrete works,erection and 3 coats of 1st grade gloss paint	NO	1		
TOTAL TO SUMMARY PAGE					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	MOI BARACKS 33/11KV SUBSTATION				
	SWITCHYARD				-
1	Excavate oversite vegetable soil average depth 150mm and cart way to Municipal Council designated damping site	SM	1200		
2	Average 0.2mm thick selected well compacted imported and approved murrum fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at storm drain	CM	250		
3	Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarantee and provide a copy to client.	SM	1200		
4	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	1200		
5	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	700		
6	Provide 150mm precast concrete or CAST insitu channe 300mm above switchyard level along the edges of invert drain block,road edges to secure from falling ballast.	LM	160		
7	Allow cleaning and re use of existing ballast to appointed areas in the yard	SM	500		
	CABLE TRENCHES & DUCTS				
1	Refurbish existig cable trenches by hacking 150mm tongue and groove and extension to 300mm above ground by lean concrete on the 150mm walls- Provisional length	LM	15		
2	Allow for extension of above trench by masonary 600x600	LM	20		
3	Provide and put in place (600x300x70mm) thick precast concrete trench covers reinfoced with Y8 bars spaced at 100mm both ways with fair face finish on both side; concrete to class 20	NO	120		
	STORM WATER DRAINAGE				
1	Excavate on site drain trench not exceeding 1.5m deep including plucking and struting, dispoasl of soil to receive drainage channels and forming sloping sides in well compacted murrum bed.	CM	90		
	TOTAL TO SUMMARY PAGE 				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	CHEPKOILEL 33/11KV SUBSTATION				
	SWITCHYARD				-
1	ALLOW for oversite removal of Growths ,clearing all vegetation on non live areas within the KPLC premises including heaping existing ballast together to allow surface treatment	SM	3600		
2	Average 0.2mm thick selected well compacted imported and approved murrum fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at storm drain-selected areas	CM	500		
3	Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarantee and provide a copy to client.	SM	3600		
4	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	3600		
5	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	1500		
6	Provide 150mm precast concrete or CAST insitu channe 300mm above switchyard level along the edges of invert drain block,road edges to secure from falling ballast.	LM	300		
7	Allow cleaning and re use of existing ballast to appointed areas in the yard	SM	1000		
	CABLE TRENCHES & DUCTS				
1	Allow for construction of masonry trenches 400x400mm including 120mm lean concrete base,whoop iron including all miortars and geneal builders work to project 300 above switchyard,and include all plaster finishes	LM	60		
2	Provide and put in place (600x300x70mm) thick precast concrete trench covers reinfoced with Y8 bars spaced at 100mm both ways with fair face finish on both side; concrete to class 20	NO	350		
3	Allow for repair and reinforce existing chainlink-and gates posts,mesh,strands where dilapidated and realign well with new proposed half wall ,all works including either priming all metal posts and tassociated work to make good	Item	1		
	TOTAL TO SUMMARY PAGE				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	MUMIAS 33/11KV SUBSTATION				
	<u>SWITCHYARD</u>				-
1	ALLOW for oversite removal of Growths ,clearing all vegetation on non live areas within the KPLC premises including heaping existing ballast together to allow surface treatment	SM	1600		
2	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 storm drain-selected areas	CM	340		
3	Apply suitable and approved weed killer, herbicide to surfaces of backfill as per the Manufacture's written instructions and a 12 month guarantee and provide a copy to client.	SM	1600		
4	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with weltd laps of 200mm wide.	SM	1400		
5	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	1000		
6	Provide 150mm precast concrete or CAST insitu channe 300mm above switchyard level along the edges of invert drain block,road edges to secure from falling ballast.	LM	250		
7	Allow cleaning and re use of existing ballast to appointed areas in the yard	SM	400		
	CABLE TRENCHES & DUCTS				
1	Allow for construction of masonry trenches 400x400mm including 120mm lean concrete base,whoop iron including all miortars and geneal builders work to project 300 above switchyard,and include all plaster finishes	LM	60		
2	Provide and put in place (600x300x70mm) thick precast concrete trench covers reinfoced with Y8 bars spaced at 100mm both ways with fair face finish on both side; concrete to class 20	NO	200		
	TOTAL TO SUMMARY PAGE				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	STORM WATER DRAINAGE				-
1	Excavate on site drain trench not exceeding 1.5m deep including plucking and struting, dispoasl of soil to receive drainage channels and forming sloping sides in well compacted murram bed.	CM	130		
2	Lay (300x450mm) precast concrete invert block drains to a suitable fall with grooved edge and tounge joints filled with cement/sand mortar (1:3) and laid on 50mm thick plain concrete bed	LM	120		
3	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete slabs jointed in 1:3 cement sand mortar	LM	120		
	RETAINING MASONARY WALL 600MM AGL				
	Block walling in cement sand mortar (1:3) including and reinforced with 20 SWG hoop iron in every two alternating course.including all bases excavations ,concrete works				
1	200mm thick natural stone wall	SM	60		
2	Ditto but pile pillars	SM	30		
3	Allow class 20 concrete for stips and bases	CM	12		
4	Allow for plaster/finishes,with black bituminous coat.	SM	200		
5	Allow for PVC ducts at various locations as directed with bends (25Nos) including all works haunching and the like	LM	60		
	REFURBISHMENTS				
1	allow 100mm thick approved and well compacted quarry dust blinding Non live areas and external places and access roads/3m fence buffer, levelled and compacted by cutting and filling where necessary	SM	500		
2	ALLOW for hard compacted 4m(60LM) gravel road on 33/11kv side with 500mm compacted layers to 95MDD and culvert 600 including all works and headwall/kerbs,chanel and all paintings.finished surface with quarry chips 100mm.	Item	1		
3	Rehabilitate the existing Gate, Gate house and Toilet by, internal and external finishes, Repair all broken windows ,panes,Lighting ,and Prepare and apply first grade undercoat and two coat of paints on refurbished walls with coporate colours	Item	1		
	TOTAL TO SUMMARY PAGE				

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	TOTAL FROM PAGE 9				
	TOTAL FROM PAGE 10				
	SUBTOTAL LOT 3 TO FINANCIAL SUMMARY				
	(VAT EXCLUSIVE)				
	Amount in words:.....				
				
	Company Stamp				
	Signed:				
	Name:				
	Address:				
	Contract Period: Lot 3... 4 MONTHS				