	BILL OF QUANTITIES FOR REHABILITTION & SUBSTATION BALASTING LOT-4				
ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	Preliminaries-For All substation sites in the Lot				
	Allow for a temporary site office prefarably portable that can be shifted to multiple site or external arrangement as per contractor convinience(Works lasting only 4 months)	iTEM	1		
1	Ditto but provide at his own risk and cost where directed on the site weatherproof lockup sheds for the safe storage and 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.	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	The Contractor shall allow and be entirely responsible for the 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.	ITEM	1		
6	Allow for Insurance Cover for the proposed works and workers.	ITEM	1		
7	Allow for a qualified personel conservant with Kenya Power safety regulations for the entire contract period	ITEM	1		
8	Allow communication,facilitation ,Data for inspections and the like for CIT and Project Team-provisional 1,200,000	ITEM	1		
9	Allow for supply of power or provide for an adequate Capacity Generator on site for the supply of power for use for the works.	ITEM	1		
K	Allow for demobilization and relocation to different site	ITEM	1		
	TOTAL TO SUMMARY PAGE -PRELIMINARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	NANDI HILLS 33/11KV SUBSTSTION				
	SWITCHYARD				
1	Clear shrubs, bushes and all vegetation inside and around the substation perimeter chainlink fence externally and internally including all debris and the like and burn the arising	SM	2480		
2	Bulk oversite excavation to remove vegetable soil average depth 150mm and cart way to Municipal Council designated damping sites	CM	380		
3	Average 300mm 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(ms)	CM	400		
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.	SM	2480		
5	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	2480		
6	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast (machine crushed) in switchyard (***Live Area only).***	SM	1270		
8	Provide 150mm precast concrete or CAST insitu channel 300mm above switchyard level along the edges of invert drain block(ms),road edges(ms) to secure ballast from falling	LM	280		
9	Allow for 100mm thick, loose - surfacing quarry dust to all ***Non - Live areas***	SM	920		
	TOTAL TO SUMMARY PAGE 2				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Compacted Backfill - Lower depression area				
10	ALLOW for hard compacted and approved murram average depth 1.8m depth in layers not exceeding 150mm average compacted layers to 95%MDD, to the lower side of existing control room for the new control room building area including slope stabilization, stone pitching/gabioning as necessary. Final level to match existing/rehabiliated live switch-yard	CM	1045		
11	Base stabilization/thickening using hardcore boulders average 300mm thick well compacted to receive hard compacted murram including all necessary french drains using 100mm dia. HD Pvc pipes (300m) below the hardcore as directed by the Engineer	CM	235		
	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 thick walls- including road crossing and manholes on both sides and new extension as necessary. Allow for 150mm diameter heavy duty pvc ducts 45m long and bends- to a maximum of 30pices for connecting equipments to new and refurbished trenches	LM	100		
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 sides; concrete to class 20	NO	300		
3	Allow for KPLC re-locations/re-positioning of existing cables and other equipments, earthing improvements and the like during the works	Item	1		
	TOTAL TO SUMMARY PAGE 3				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	STORM WATER DRAINAGE				
1	Excavate on site drain trench not exceeding 1.5m deep including plunking and struting, dispoasl of soil to receive drainage channels and forming sloping sides well compacted to receive side slabs (ms)	CM	485		
2	Lay (300x450mm) precast concrete invert block drains to a suitable fall with grooved edge and tounged joints filled with cement/sand mortar (1:3) and laid on 50mm thick plain concrete bed terminating at storm oulets.	LM	270		
3	Allow for 300mm diameter culverts at the gate or 300mm wide gratings in ms angles and 20mm diameter rods and storm interceptor channels as necessary	LM	6		
4	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete slabs jointed in 1:3 cement sand mortar	LM	540		
	PERIMETER WALLING 172MX1.2M - 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 & dewatering				
1	200mm thick natural stone wall	SM	210		
2	Ditto but pile pillars	SM	70		
3	Allow class 20 concrete for strips and bases including all necessary reinforcements in D10 @ 200 centers , formwork and the like	CM	31		
4	Allow for plaster/finishes,with 2 coats of black bituminous paint	SM	210		
5	Allow for 350x350 x 50mm Thick precast concrete copings bedded on top of 200mm. thick walling in 1:4 Cement sand mortar and extra over for copings on pile pillars	LM	210		
	TOTAL TO SUMMARY PAGE 4				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	MASONRY RETAINING WALL - 43M Long x 2.5M at edge of new filled up/compacted/sabilized ground				
	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, planking & strutting and dewatering				
6	200mm thick natural stone wall	SM	110		
7	Ditto but 400mm thick pile pillars @2.5m c/c with a projection of 600mm from the face of the wall externally	SM	25		
8	Allow class 20 concrete for strips and bases including all necessary reinforcements in D10 @ 200 centers , formwork and the like including base thickening	CM	10		
9	Allow for plaster/finishes,with 2coats of black bituminous paint	SM	140		
10	Allow for 350x350 x 50mm Thick precast concrete copings bedded on top of 200mm. thick walling in 1:4 Cement sand mortar	LM	43		
	REFURBISHMENTS/Guard House/Pit-Latrine				
1	Refurbish existing gate by applying 2coats of metal gloss paint to kplc approval including gate alignment, drop bolts, hinges and the like	Item	1		
2	ALLOW for 2mx2m security sentry within the substation next to existing gate with lighting point and 2nos. Socket outlets, screeded concrete floor, including fencing it off from the switch-yard with chainlink fence perimeter not exceeding 12m long and creating an exit grilled wicket-gate to the outside. The sentry should be free external weather elements -Allow 200,000	Item	1		
	TOTAL TO SUMMARY PAGE 5				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
3	Allow for repair and reinforce existing chainlink-**290m long** wooden posts,mesh,strands where dilapidated and realign well with new proposed half wall, including extending by **20m** to match existing, all works to client satisfaction.	Item	1		
4	Allow for standard kplc two-door 2mx1.8m pit - latrine within the switch-yard at the non-live area - drawing -Allow 8sqm -IQSK Unit rates	Item	1		
	ACCESS ROAD REPAIR & EXTENSION(Live Switch-yard)				
1	ALLOW for hard compacted 5m wide (235sq.m.) gravel road on 33/11kv live- side with average 300mm compacted layers to 95%MDD including road kerbs,channels and all road paintings.finished surface with quarry chips 100mm. Extra over on provision to curved sectionS near tranformer and at the junction to control room areas.	SM	235		
2	Allow for Repair of existing external murram access road 20m long leading to the substation gate including re-graveling, surfacing and side drains including connection with the internal road	Item	1		
	CONTROL ROOM MODIFICATION (7mx5m) and height to match existing				
	The items of demolitions and removal shall include shoring making good disturbed areas to match existing and loading and carting away debris unless otherwise specified.				
1	Carefully demolish the existing external masonry wall portion 5m,hack the existing RC Floor slub,roof beam and the like including internal cable trenches and extend the same to connect to the new trench and cut away rubbles.	ITEM	1		
	TOTAL TO SUMMARY PAGE 6				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
2	Provide an approved fire,water and dust proof hoarding or barrier between the wall being demolished and the control room installed panels.	ITEM	1		
3	Properly secure any damage or mishandling the existing contrl cables during the entire contruction period.and make good all demolished area	ITEM	1		
4	Excavate strips and column bases commencing from stripped level and not exceeding 1.5m deep and cart away the spoil including all necessary form work,plunking,struting,leveling and blinding trench bottom and water dispasal.	CM	40		
5	Average 150mm thick layers of selected and well compacted imported murram fill , compact using approx. 2 ton vibrating roller to receive hardcore filling.	CM	10		
6	Selected imported hardcore fill, compacted in layers of 150mm thick to make up levels to satisfaction of client	CM	7		
7	Return, fill and ram selected excavated materials around foundations and trenches.	CM	3		
8	Load cart away surplus excavated materials and dispose in areas designated by local authority.	CM	42		
9	50mm thick approved murram blinding on hardcore fill.	SM	35		
	Insecticide.				
10	Prepare and apply "Premise 200 CC " or equal and approved insectcide to surfaces of blinding as per manufacturer"s written instructions.	SM	35		
	Damp Proofing.				
11	1000 gauge polythene DPM laid on top of blinding including 200mm side and end laps.	SM	35		
	BRC Mesh A142				
12	BRC mesh reference No. A142 weighing 2.22kg per square meter including 150mm minimum end and side laps,bends, tying wires and spacer blocks.	SM	35		
	TOTAL TO SUMMARY PAGE 7				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Concrete				
	Vibrated reinforced concrete class 25 as described in				
13	150mm thick ground floor slab.	SM	35		
14	Column footings /plinth beams /thickenings/strips	CM	10		
	Superstructures				
	Damp Proof Course.				
15	200mm wide dump proof cource (DPC) laid with 1:3 mix cement sand mortar.	LM	25		
	Walling(both sub structure and super structure)				
	Walling in cement sand mortar (1:3) including and reinforced with 20 SWG hoop iron in every two alternate courses.				
16	200mm thick medium dressed natural stone wall/approved concrete blocks/Machine cut stones as control room walling.	SM	90		
	Sawn formwork to;				
17	Vertical sides of floor slab/ beams /lintel	LM	55		
18	Sides of columns	SM	48		
	Vibrated reinforced concrete class				
	25 (1:2:4/25) as described in:				
19	Ring beam/Columns,Lintels	CM	10		
	Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing. High tensile bars to BS 4469: 8mm to 12mm bars in strip foundation,column bases,footing and cable trenches.				
20	D 8 -12	KG	1200		
21	Allow for fiting of 2Nos. PVC Sliding windows with4mm glazing.Window and 1door to match the existing.	ITEM	1		
22	Allow provisional sum for small accessories,lugs,connectors fittings and the like to facilitate builders work completeness during transformer ,panel and cable instsllations ksh. 300,000	ITEM	1		
	TOTAL TO SUMMARY PAGE 8				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	ROOF WORKS(Headroom to match existing)				0
23	Allow for new Lean to roof consisting of 5 no. light weight trusses, 26 G alluminium sheets with fireprrooof ceiling at headroom, hoisting and fixing into position steel trusses spanning 5m,Roofing sheet rain water goods and any other related fittings.	SM	40		
	Finishes				
24	13mm thick cement sand plaster (1:4) to walling and soffits of floor slab mixed with lime smooth finish to receive paint both internally and externally.	SM	360		
25	13mm cement sand mortar(1:4) on walling and the gable surfaces externally with steel foat finish.	SM	40		
26	Prepare and apply undercoat, 1 coat of vinyl matt and 3 coats of premium grade silk vinyl emmulsion paint on all plastered surfaces internally and externally. (Colour scheme to be provided by client)	SM	360		
	Flooring				
27	20mm thick cement sand (1:3) screed for floor to receive hardener	SM	40		
28	30mm thick well polished floor finish OR hardened industrial floor	SM	40		
	ELECTRICAL INSTALLATION WORKS				
29	Electrical builders work to power supply points for 4No. double socket outlets, 3No. lighting points and all the necessary fittings, earthing the control room incuding chasing and making good all works as described- INCLUDING Supply and fix of all fittings and commisioning electrical works to approval of client	ITEM	1		
30	Repair existing fixtures,repaint checker plates,electrical fittings ,sockets and the like	LOT	1		
	TOTAL TO SUMMARY PAGE 9				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
31	Allow for fume extracxtor fan on battery area with extrusion vanes,minimum 600mm dia complete with fittings gauze anti dust protection and guard	ITEM	1		
32	Allow suply fix ,calibration and mounting of Fire extinguishers as follows ;13kg/ltr CO2,dry powder 2 sets .	Sets	2		
1	Fabricate and fix double leaf steel gate 4m wide to match existing, including 400x400mm R.C columns, pcc copings, 75x75x4mm mildsteel S.H.S posts embeded in concrete columns with fish-tailed angle brackets for hanging the gate,all necessary iron-mongery, drop-bolts,painting to both steel gate and conrete columns.All neccessary excavations, reinforcements(D8-D12) to columns and column bases to Engineers approval	LOT	1		
2	ALLOW for hard compacted 4m wide (120sq.m.) gravel road to serve new control room from existing external murram road with average 500mm compacted layers to 95%MDD including road kerbs,channels and all road paintings.finished surface with quarry chips 100mm thick, including extra over on provision to curved sections. Road base stabilization averagely 400mm thick using boulders/harcore hand-packed & compacted to Engineer's approval including all necessary excavations & leveling.	SM	120		
	TOTAL TO SUMMARY PAGE 10				
	SUMMARY PAGE				
	TOTAL FROM PAGE -PRELIMINARIES ALL LOTS				
	TOTAL TO SUMMARY PAGE 2				
	TOTAL TO SUMMARY PAGE 3				
	TOTAL TO SUMMARY PAGE 4				
	TOTAL TO SUMMARY PAGE 5				
	TOTAL TO SUMMARY PAGE 6				
	TOTAL TO SUMMARY PAGE 7				
	TOTAL TO SUMMARY PAGE 8				
	TOTAL TO SUMMARY PAGE 9				
	TOTAL TO SUMMARY PAGE 10				
	SUB-TOTAL NANDI HILLS SUBSTATION				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	CHERANGANI 33/11KV SUBSTSTION				
	SWITCHYARD				
1	Clear shrubs, bushes and all vegetation inside and around the substation perimeter chainlink fence externally and internally including all debris and the like and burn the arising	SM	930		
2	Bulk oversite excavation to remove vegetable soil average depth 300mm and cart way to Municipal Council designated damping sites	CM	280		
3	Average 300mm 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(ms)	CM	280		
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.	SM	930		
5	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	930		
6	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast (machine crushed) in switchyard	SM	930		
8	Provide 150mm precast concrete or CAST insitu channel 300mm above switchyard level along the edges of invert drain block(ms),road edges(ms) to secure ballast from falling	LM	190		
9	Allow cleaning and re use of existing ballast to appointed areas in the yard	SM	310		
	TOTAL TO SUMMARY PAGE 1				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	CABLE TRENCHES & DUCTS				
1	Refurbish existig cable trenches by hacking 150mm tongue and groove, extension to 300mm above ground by lean concrete on the 150mm thick walls, rehabilitate trench base by cleaning and rescreeding to create slope including allowing connection to new extension trench (m.s) - Provisional length - 25m	LM	25		
2	Allow for extension of above trench by masonary 600x600mm overal dimensions including all excavations, cartaway,backfill, concrete class 20 base reiforced with Y8 bars @ 100c/c, internal and external plaster- provisional length 50m	LM	50		
3	Allow for 150mm diameter heavy duty pvc ducts provisional length 40m including bends (30Nos.), excavations, concrete bases and haunching and connecting equipments to new and refurbished trenches	LM	40		
4	Allow for KPLC re-locations/re-positioning of existing cables and other equipments, earthing improvements and the like during the works	Item	1		
5	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 sides; concrete to class 20	NO	275		
	STORM WATER DRAINAGE				
1	Excavate on site drain trench not exceeding 1.5m deep including plunking and struting, dispoasl of soil to receive drainage channels and forming sloping sides well compacted to receive side slabs (ms)	CM	225		
	TOTAL TO SUMMARY PAGE 2				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	STORM WATER DRAINAGE				
1	Excavate on site drain trench not exceeding 1.5m deep including plunking and struting, dispoasl of soil to receive drainage channels and forming sloping sides well compacted to receive side slabs (ms)	CM	225		
2	Lay (300x450mm) precast concrete invert block drains to a suitable fall with grooved edge and tounged joints filled with cement/sand mortar (1:3) and laid on 50mm thick plain concrete bed terminating at storm oulets.	LM	130		
3	Allow for fixing 300mm diameter culverts at the gate or 300mm wide gratings in ms angles and 20mm diameter rods and storm interceptor channels as necessary to Engineers approval	LM	6		
4	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete slabs jointed in 1:3 cement sand mortar	LM	260		
	PERIMETER WALLING 130MX1.2M - 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 & dewatering				
1	200mm thick natural stone wall	SM	155		
2	Ditto but pile pillars	SM	43		
3	Allow class 20 concrete for strips and bases including all necessary reinforcements in D10 @ 200 centers , formwork and the like	CM	25		
4	Allow for plaster/finishes,with 2coats of black bituminous paint	SM	390		
5	Allow for 350x350 x 50mm Thick precast concrete copings bedded on top of 200mm. thick walling in 1:4 Cement sand mortar	LM	130		
	TOTAL TO SUMMARY PAGE 3				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
7	Allow for base stabilization, with concrete class 20 averagely 400mm thick, widening/thickening, of base and support pillars at the lower extended side	CM	10		
	CHAINLINK FENCING & REFURBISHMENTS				
	Chain-link Fencing				
1	Refurbish the dilapidated and warn-out chanlink fence in wooden poles by constructing new 2.4m high x10A gauge chainlink fence, complete with 4mm diameter 5 strands of galvanized plain wire pass through 3.0m high 150x150 - cranked reinforced concrete posts placed at 2.5 m centers, 12 gauge barbed wire on 450mm - cranks, including, excavation and erection works, 1:3:6 mix mass concrete surround at 600mm deep. Allow for double concrete struts at all corners and gates and as shall be directed by the Engineer. Carefully remove and hand-over to client the old chailink fence in totality	LM	130		
	Substation Gate - Double leave				
1	Carefully remove the existing dilapidated steel gate, and hand-over to client. Fabricate and fix standard primary substation Grill gate 75x75x4mm main frame with 50mm diameter 6No.aheavy duty gauge 8 wire mesh, bushes including excavation for the gate columns & bases, concrete works, reinforcement D8-D12, erection & proper alignment, gate column pcc copings and 3 coats of 1st grade gloss paint to Engineer's approval on both metal surfaces and gate columns	LOT	1		

2	ALLOW for 2mx2m security sentry within the substation next to the relocated gate with lighting point and 2nos. Socket outlets, screeded concrete floor, including fencing it off from the switch-yard with chainlink fence perimeter not exceeding 15m long and creating an exit grilled wicket-gate to the outside. The sentry should be free from vagaries of external weather elements	Item	1		
	TOTAL TO SUMMARY PAGE 4				
ITEM NO.	**DESCRIPTION**	**UNIT**	**QTY.**	**UNIT RATE**	AMOUNT
	ACCESS ROAD REPAIR & EXTENSION				
1	ALLOW for hard compacted 5m wide (170sq.m.) gravel road on 33/11kv live- side with average 500mm compacted layers to 95%MDD including road kerbs,channels overal 90LM and all road paintings.Finished surface with quarry chips 100mm, including extra over on provision to curved section near tranformer plinth.	SM	170		
2	Allow for Repair of external murram access road 20m long leading to the substation gate including graveling, loose surfacing and side drains including connection with the internal road and laison with KENHA.	LM	20		
3	Allow for 600mm dia. x 6m long concrete culvert including all excavations, concrete base, head & wing walls, haunching and clean the open earth-drain 40m long in laison with relevant Authorities	Item	1		
	TOTAL TO SUMMARY PAGE 5				
	SUMMAY PAGE			AMOUNT	
					-
					-
	TOTAL FROM PAGE 1				
	TOTAL FROM PAGE 2				
	TOTAL FROM PAGE 3				
	TOTAL FROM PAGE 4				
	TOTAL FROM PAGE 5				
	SUB-TOTAL CHERANGANYI 33/11 SUBSTATION				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	ITEN 33/11KV SUBSTATION				
	SWITCHYARD				
A	Excavate oversite vegetable soil average depth of 300mm and cart way to Municipal Council designated damping site	SM	1500		
B	Supply and spread average 150mm thick selected well compacted imported and approved murram fill, compacted in layers of 150mm thick using a plate/vibrating portable roller compactor to receive ballast (ms) to gradual slope terminating at storm drain	SM	1500		
C	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	1500		
D	1000 gauge polythene or other equal and approved membrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	1430		
E	Supply and spread uniformly 150mm thick (30-40mm) crushed Agregates/ ballast in switchyard. (machine crushed)	SM	1430		
F	Provide concrete insitu channel 200x 200x275mm above switchyard level along the edges of invert drain block,road edges to secure from falling ballast.	LM	175		
	STORAGE AREA				
G	Site clearance to remove grass, shrubs and the like and burn thearises.	SM	750		
H	Excavate oversite 150mm thick and cart away the excavated materials to designated County damping area.	SM	750		
I	Supply and spread average 150mm thick selected well compacted imported and approved murram fill, compacted in layers of 150mm thick using a plate/vibrating portable roller compactor to receive ballast (ms) to gradual slope terminating at storm drain	SM	750		
	TOTAL TO SUMMARY PAGE 1				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	FENCING				
J	Construct 225mm thick substructure quarry natural stone wall and approved natural machine cut stone walling in superstructure and reinforced with 20 SWG hoop iron in every two alternating course.bedded and jointed in cement and sand (1:3)mortar; maximum height 1.5m from strip foundation to copping top(MS);including excavation, backfilling and carting away surplus materials from site.	SM	202		
K	Ditto but 400x400mm stone piles/pillars at 3.0m intervals including construction joints at every 30.0m.	SM	72		
L	150mm thick viibrated reinforced concrete class 25/20 (1:2:4) in 1 strip and pile foundations	CM	21		
M	Ditto but in throted copping; average 50mm thick and with both falls.	CM	4		
N	15mm thick cement sand plaster (1:4) to walling to receive paint (ms)	SM	279		
L	Prepare and apply two coats of premimium grade bituminous paint on wall plastered surfaces	SM	279		
	Chainlink				
A	1.5m high x10A Gauge chain-link complete with 4mm diameter 3 strands of galvanized plain wire passing through hole in the 2.0m high 75x50x1.5mm thick RHS,450mm cranked posts (55No) placed at 3.0m centers, 3No. strands of 12Gauge barbed wire on 450mm cranks, including, excavation and erection works, mortised in 1:3:6 mix mass concrete surround 300mm deep, including 16N0.75x50x1.5mm thick RHS strut posts at approprite locations; including priming and painting the steel posts with supergloss premimium grade paint	LM	155		
B	Fair face plain concrete insitu copping (1:3:6)mix, size; 200x75mm high to anchor and hold chain-link ion top of half wall.	CM	5		
	TOTAL TO SUMMARY PAGE 2				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	Gate				
C	Refurbish the exist gate; repaint and make good to satisfactory of the Engineer.	ITEM	1		
	CABLE TRENCHES & DUCTS				
D	Refurbish existig cable trenches by hacking 150mm and raise to 300mm above ground by lean concrete on the 150mm walls and clearing the debris in trenches.	LM	61		
E	Provide and put in place precast concrete trench covers size; 900x300x75mm thick, reinfoced with T8 bars spaced at 100mm both ways with fair face finish on both side; concrete to class 25	NO	211		
F	Supply and lay 110mm diameter class 41 UPVC ducts to receive control cables running on the surface; including excavation of trench, backfilling and 100mm thick hounching on ducts sorrounds.	LM	150		
	STORM WATER DRAINAGE				
A	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	223		
B	Lay (300x450mm) precast concrete invert block drains to a suitable fall with grooved edge and tounged joints filled with cement/sand mortar (1:3) and laid on 50mm thick plain concrete bed	LM	120		
C	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete side slabs jointed in 1:3 cement sand mortar	LM	240		
D	Fair face plain concrete strip (1:3:6)mix, size; 150x250mm high to on both side of drain including excavation and carting away the excavated materials.	CM	13		
D2	**Allow for combined Laser jet printer ,scanner, up to A3 to be used in the entire project for project managers office use. Allow 140,000**	ITEM	1		
	TOTAL TO SUMMARY PAGE 3				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
	ACCESS ROAD				
E	Excavate access road 300mm deep commencing from ground level and cart away to designated damping area by the County Government.	CM	53		
F	Supply and handpack hardcore, 450mm thick, well rammed and consolidated in 150mm thick layers in stripped access road.	CM	79		
G	Ditto but 50mm thick approved 3/8" clean ballast on access road survace	SM	375		
H	250 x 125mm High pre-cast concrete kerb bedded and jointed in cement and sand (1:4) mortar including 325x100mm thick mass concrete class 20/20 in foundation and haunching at the back, all necessary formwork and excavations.	LM	174		
I	Construct 8.0m long open drain channel size; 450mm wide and 450mm deep, 150mm thick reinforced concrete walling and base; including 63x63x4mm thick MS angle line embedded in concrete with fish-tailed 12mm diameter x 125mm long MS inserts, in drain walling to recive steel gratting (ms);	ITEM	1		
J	D10 at 150mm centres both ways	KG	105		
K	Provide fabicated 8.0m long heavy duty grating; 450mm wide with 20mm ribbed bars welded in MS angle 63x63x4mm thick frame at 50mm centres . Prpare and apply gloss primer and two coats of 1st grade aluminium gloos paint.	ITEM	1		
	Prefabricated Mild steel Unit-Hut				
A	Rehabilitate the exist control room building; repair and make good all areas, supply and lay 600x600x50mm thick precast paving blocks embeded on well compacted 50mm murram, jointed with cement/sand mortar (1:4) around the contol building.	ITEM	1		
A2	Remove and cart old fence and securely place in designated position in the store yard				
	TOTAL TO SUMMARY PAGE4				

ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT RATE	AMOUNT
B	Prepare and apply two coats of premimium aluminium gloss paint to unit-hut surfaces internally and externally	ITEM	1		
C	Allow for construction non-executive pit latrine , Approx.4m^2 with flat roof fixed on steel rafters and 28G pre-painted box profile roofing sheets. [Draft proposal by contractor to client for approval]-IQSK unit rates	ITEM	1		
D	Ditto but guard house.	ITEM	1		
	TOTAL TO SUMMARY PAGE 5				
	SUMMAY PAGE			AMOUNT	
	TOTAL FROM PAGE 1				
	TOTAL FROM PAGE 2				
	TOTAL FROM PAGE 3				
	TOTAL FROM PAGE 4				
	TOTAL FROM PAGE 5				
	SUB-TOTAL ITEN 33/11 SUBSTATION				
	SUMMARY PAGE LOT 4 NORTH RIFT				
	SUB-TOTAL. NANDI HILLS 33/11 KV SUBSTATION				
	SUB-TOTAL CHERANNGANYI 333/11KV SUBSTATION				
	SUB-TOTAL ITEN 333/11KV SUBSTATION				
	TOTAL				
	ADD 0.03% LEVY				
	ADD 16% VAT				
	TOTAL TO FORM OF TENDER LOT 4-NORTH RIFT				
	Amount in words:.....				
	.....				
	.....				
	Company Stamp				
	Signed:				
	Name:				
	Address:				
	Conctract Period: …12 MONTHS COMPLY TO DURATION .....YES.....NO.....				