






PROPOSED CIVIL & BUILDING WORKS FOR NGEWA 66KV SWITCHING STATION


Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
	PRELIMINARIES				
	Location of and access to the Site				
A	The site of the proposed works is located approx. 9Km off Mai Mahiu - Narok road, at place called Ngema. The site is within Kenya Pipeline pump No.22 premises. The Contractor is advised to visit Site, to familiarize himself with the nature and position of the Site. No claims arising from the Contractor's failure to do site visit will be entertained.				
	Pricing items of preliminaries				
B	Prices SHALL BE INSERTED against items of "preliminaries" in the tenderer's priced Bills of Quantities. The Contractor is advised to read and understand all preliminary items. The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all cost involved in complying with all the requirements for the proper execution of the whole of the Works in the Contract				
	Prevention of Accidents, damage or loss.				
C	The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.				
	Existing Services				
D	Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services. The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services, and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the Client.				
	Hoarding				
E	The Contractor shall allow for providing approximately 2.5m high and 200.0 metres hording around the proposed site, maintaining and later clearing away completion such as hoarding, gates and the like as may be required for the security of the site and as instructed by the Client.	ITEM	1		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
A	<p>Safety Personnel</p> <p>Contractor should allow for a qualified safety person conversant with Kenya Pipeline Ltd contractors safety regulations for the entire contract period who will be responsible for receiving work permits in daily basis The working hours shall be those generally given by the Kenya Pipeline Ltd in accordance with the safety regulations of fuel Pumping site/station. No work shall start in the absence of the safety person having received permit to work from the relevant authorizing officer. (Refer to attached safety requirements for Contractors working within KPC premises)</p>	ITEM	1		
B	<p>Insurance</p> <p>Allow for Insurance Cover for the proposed works and workers.</p>	ITEM	1		
C	<p>Site Security</p> <p>The Contractor shall 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.</p>	ITEM	1		
D	<p>Sign Boards</p> <p>The Contractor shall allow for providing erect publicity, project details, directional, safety, etc sign boards, maintaining and later clearing away on completion a site sign board. The positioning, the size, type of construction and lettering shall be to client's approval.</p>	ITEM	1		
E	<p>Power for the Works</p> <p>Allow for adequate Capacity Generator on site for the supply of power for use for the works.</p>	ITEM	1		
F	<p>Approvals</p> <p>Allow for all the necessary statutory approvals for the works by relevant county departments, replication of drawings to required formats, Endorsement by relevant professional persons; and submit a set of approved drawings before commencement and as built drawings to client on completion,including site and project registration with NCA.</p>	ITEM	1		
G	<p>Allow facilitation for Kplc PM,PE & Project Supervisor on communications and data-provisional Sum of Kes.1,200,000 for both electronic and Print</p>	ITEM	1		
H	<p>Visitor's Book and Site Diary</p> <p>The Contractor shall keep on the Site a visitors' book for recording the names of all persons who visit the site for the purpose of the project. He shall also maintain on the Site a diary in which he shall record site activities on a daily basis and particularly any occurrence which bears on the progress of the Works in any way. The visitors' book and the diary shall be surrendered to the Client at the completion of the project or at any other time that he may be directed.</p> 	ITEM	1		
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
A	<p>Site Offices The Contractor shall allow for providing, maintaining and later clearing away on completion adequate (about 15m²) site offices with standard furniture for the use of the Project Manager and site meetings.</p>	ITEM	1		
B	<p>Storage of Materials The Contractor shall 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.</p>	ITEM	1		
C	<p>Water connection In liason with M/S KENYA PIPELINE LTD - PS 22, Contractor shall allow for supply and connection of metered water to the substation, maintain and pay all the connection and running costs for the entire contract period and then transfer the meter particulars to Kenya Power upon project hand-over. This includes allowing for the clean water for the works.</p>	ITEM	1		
D	<p>National Construction Authority The National Construction Authority is a state corporation established under the National Construction Authority Act No.14 of 2011. The broad Mandate of the Authority is to oversee the construction industry and coordinate its development. NOTE: The National Construction Authority Regulations must be adhered to and relevant permits obtained, supervision team and labourers be accredited and maintained at all times.</p>	ITEM	1		
E	<p>Allow for providing the entire land spot heights and the contour profiles for establishment of the working levels.</p>	ITEM	1		
F	<p>Tests The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called by the Client for his approval or rejection and any other samples in the case of rejection until such samples are approved by the Client and the Client may reject any materials or workmanship not in his opinion up to to the approved samples.</p>	ITEM	1		
G	<p>SWITCHYARD EARTHWORKS & BALLASTING Cut down trees and uproot stumps girth not exceeding 600mm Ditto but big trees and uproot stumps girth 600-900mm. Ditto but big trees and uproot stumps girth 900-1200mm. Ditto but big tree and uproot stumps girth 2700-3000mm Cut trees into fire wood size and pack/arrange in bundles of 1.5metre width and 1.2mm high on site as directed by KPC not more than a distance exceeding 500m away from site.</p>	NO NO NO NO ITEM	42 88 6 1 1		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
A	Excavate pits size; 500x500x500mm deep, mix excavated material with imported approved manure; supply and plant enviromentally conducive and approved trees seedlings at least 700mm tall and water untill well established; in an area provided by KPC within the distance not more than 500m from site.	NO	300		
B	Clear site of all small trees, shrubs, grasses, bushes etc, grab up their roots and burn the arising.	SM	1750		
C	Load and transport heaped excavated materials on site of approximately calculated volume and damp as directed to a distance not exceeding 500m away.	CM	1100		
D	Bulk excavation on raised areas to reduce level and heap excavated materials on site as directed.	CM	875		
	Load and cart away excavated material to area that to be shown on site, a distance not exceeding 500m away.	CM	875		
E	Backfill to make up level with approved borrowed murrum/gravel and compact to 95% MDD (AASHTO T99) in layers of 150mm thick.	CM	1225		
F	Oversite grading to make level the entire site	SM	1750		
G	Provide all materials, prepare and construct 200mm thick grouted stone pitching laid to slanting surfaces of excavation embakments, including outlets weep holes on slopes to drains. Rate to include 1:3 cement mortar.	SM	120		
H	Prepare and apply an approved weedicide and herbicide to surfaces of proposed switching yard as per the Manufacture's written instructions and of 5 years and beyond guatantee.	SM	1350		
I	Supply and lay 1000 gauge polythene or other equal and approved membrane laid on compacted and treated quarry dust with welted laps of 200mm wide.	SM	700		
J	Supply and spread uniformly 150mm thick (1"-2.5") ballast in switch yard- singly graded	SM	700		
K	Construct fair face plain concrete strip (channel) of (1:3:6)mix, size; 150x300mm high along both side of drainage and spread ballast. Make opening to allow run-off water from the switchyard to the drains, including excavation, cart away excavated spoil, formwork etc.	CM	6		
	Earthing				
L	Supply and spread uniformly 300mm thick red soil on the substation switchyard to receive earth grid(ms)	SM	1000		
M	Supply 120mm ² soft drawn copper conductor	LM	1000		
N	Ditto but Copper Bonded Earth Rods 5FT X 5/8" complete Bull Dog Type Clamp for Earth Rod 16mm.	NO	60		
O	Ditto but 120mm ² line-taps	NO	60		
P	Ditto but Tinned Copper Cable Lugs 120x14mm	NO	150		
Q	Allow attendance for Kenya power team to lay earth grid on well leveled substation switchyard.	ITEM	1		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
Fence & Gate					
A	2.4m high x10A Gauge chain-link complete with 4mm diameter 5 strands of galvanized plain wire passing through hole in the 3.0m high 125x125mm cranked reinforced concrete posts (60 No) 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 600mm deep, including 16N0.125x125mm concrete strut posts at appropriate locations.	LM	150		
B	Fair face plain concrete strip (1:3:6)mix, size; 250x250mm high to anchor and hold chain-link in the ground, including excavation and carting away the excavated materials.	CM	9		
C	Fabricate and fix a primary substation gate as per the provided drawing SK.No,07044/B	NO	1		
D	Excavate gate pillar bases commencing from reduced levels and cart away the spoil.	CM	4		
E	Ditto but over 1.5m deep but not exceeding 3.0m deep.	CM	1		
F	Plain concrete (1:4:8-20mm aggregates) in 50mm thick blinding for gate column bases.	SM	2		
G	Vibrated reinforced concrete class (1:2:4/25) for gate column bases	CM	1		
H	Ditto but 400x400mm gate columns.	CM	1		
I	Fair face formwork to vertical sides of the columns	SM	10		
J	High yield mild steel reinforcement 8mm and 16mm bars including cutting, bending, spacers, tying wire and fixing to BS 4449 in, column bases and columns	KG	225		
ACCESS ROAD, DRIVEWAY & PARKING					
K	Excavate access road 250mm deep commencing from stripped level and cart away to designated dumping area by the County Government.	CM	230		
Filling					
L	Handpacked hardcore, filling leveled, well rammed and consolidated in 150mm thick layers	CM	90		
M	50mm thick quarry dust blinding on compacted hardcore (ms)	SM	200		
N	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	140		
O	Extra-over ditto for curved on plan to various radii	LM	20		
P	250 x 125mm High pre-cast concrete channels	LM	60		
Q	Extra-over ditto for curved on plan to various radii	LM	20		
R	Heavy duty industrial concrete paving blocks size (210x105x80mm) minimum strength 49N/mm square laid in herringbone pattern laid to slope on quarry dust (measured separately) and compacted	SM	200		
					
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Item No.	Description	Unit	Qty		
	DRAINAGE WORKS				
A	Excavate, cut and shape in a V formation an earth drain into any material and cart away to County Government designated damping site.	CM	230		
B	Supply and lay 300mm diameter 600x450x 225mm Precast concrete invert drain blocks, including with two (2) courses side slabs on both sides laid on a 100mm thick murrum well compacted. All jointed in 1:3 cement/sand mortar.	LM	160		
C	Ditto but side slabs size; 600x270x75mm thick	LM	520		
D	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 receive steel grating (ms);	ITEM	1		
E	D10 at 150mm centres both ways	KG	105		
	Provide fabricated 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		
	66KV EQUIPMENT, BUSBARS ETC, FOUNDATIONS				
F	Excavate foundation pits commencing from reduced level and not exceeding 1.5m deep	CM	140		
G	Ditto but over 1.5m but not exceeding 3.0m	CM	28		
H	Extra -Over for excavating in all classes of rock	CM	75		
I	Allow for all necessary plunking and strutting	ITEM	1		
J	Allow for disposal of general water by pumping, bailing or otherwise	ITEM	1		
K	Return, ram and fill selected excavated, and approved borrow materials around the foundations	CM	99		
L	Load and Cart-Away surplus excavated materials from site to County Government Approved damping site	CM	68		
M	Level and Compact bases of pits to receive blinding.	SM	94		
	<u>Blinding(Plain Concrete Class 15)</u>				
N	50mm thick (1:3:6) Concrete blinding to pit bottoms	SM	95		
	<u>Vibrated Reinforced Concrete Class 25/20 mm Aggregates In:</u>				
O	Bases	CM	27		
P	Stub columns	CM	58		
Q	15mm thick average to plinth top surface finish smooth trowelled including 50mm chamfer all round on all plinths.	SM	34		
	<u>High yieled steel reinforcement bars including cutting,bending, tying and fixing in place, spacer blocks and tying wires to BS 4449.</u>				
R	D8-16mm	KG	5047		
	<u>Fair - Face FormWork to:</u>				
S	To vertical sides of stub-Columns	SM	315		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
	Cable Trenches (600x600mm deep) in Switching Yard				
A	Excavate for cable trench 900mm wide and commencing from reduced level not exceeding 1.5m metres deep.	CM	108		
B	Load and cart- away excess excavated materials from site to County Government Approved dumping site	CM	108		
C	Allow for all necessary plunking and stritting	ITEM	1		
D	Allow for disposal of general water by pumping. Bailing or otherwise.	ITEM	1		
E	50mm thick Plain concrete blinding (1:3:6)mix (Class 15/20 mm Aggregate) Vibrated reinforced concrete class 20/25 1:2:4 as described in;	SM	108		
F	100mm thick trench bed	SM	180		
G	150mm thick trench walls with fairly smooth face finish.	SM	240		
H	Provide and put in place (900x400x75mm) thick precast concrete cable trench covers reinforced with D8 bars spaced at 100mm both ways with fair face finish on both sides. [Note: The concrete used for precast covers shall be Class 30]	No.	500		
I	Supply and fix 14 Gauge galvanized perforated steel cable trays; 300mm wide and 50mm deep including mounting on the trench on well secured hangers/support (ms) and all jointed by welds and banded as appropriate to client satisfactory.	LM	200		
J	Supply and fix steel fabricated cable tray support structure of 40x25x3mm thick; girth 1300mm, to receive/support cable tray (ms) fixed with rowl bolts or welded on 150mm long M.S. inserts in the vertical sides of concrete cable trench wall at 1000mm centres and well primed with gloss primer paint and two coats of 1 st grade gunmetal gloss paint. High yielded steel reinforcement bars including cutting, tying, bending and fixing in place, spacer blocks and tying wires to BS 4449.	NO	201		
K	D 8 in cable trench @ 150mm C/C Both ways Fair Face - Form work to:	KG	2344		
L	Vertical sides of trench walls.(Internally and Externally)	SM	520		
M	Allow for 30mm thick average cement/sand screed to cable trench bed sloping to drain run-off water including making out-let holes and supply and fix 50mm diameter PVC out-let pipes to the open drains.	SM	120		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
	<p>STEEL GALVANIZED STRUCTURES</p> <p>Supply Fabricated Steel Structures for 66kV equipment including Bus Bars, Voltage and Current transformers, Surge Diveters, Post Insulators and Isolators, Lighting mast etc. The steel structures shall be manufactured from hot-rolled structural steel sections of tensile strength of 430-460N/mm², yield strength of 255N/mm², density of 7860kg/mm² galvanizing thickness of >110 microns as per drawings attached including all welding and nuts and bolts connections, stiffener plates/cleats, washers, etc, including transporting to site and delivery to site in a well coded manner, fully assembled to ascertain completeness and handed over to client ready for erection.</p> <p>Notes: 1) All Holes To Be 18mm diameter where applicable for M16 Bolts unless otherwise stated. 2) All Steelwork to Be Free From Rust, Rust, Dust Burrs E.T.C Then Galvanised By Hot Dip. Process, Thickness and Quality of Zinc Coating to Withstand Test of 729. 3) Assembly Bolts, Nuts and washers to Conform TO BSS 916 and the Quantity Supplied to Include 10% Spare Allowance. 4). Fabricators Are To Designate All Steelwork Items and Provide Erection Mark Plans.5) All Individual Steel Parts to Be Marked - KPLC</p>				
A	CTs Structure; size 200x200x6mm thick SHS and 2.40m long - Approx. 165 Kgs each.	No.	9		
B	VTs Structure; size 200x200x6mm thick SHS and 2.40m long - Approx. 165 Kgs each.	No.	9		
C	Post Insulator Structure; size 200x200x6mm thick SHS and 3.0m long - two-legged - Approx. 350 Kgs.	No.	6		
D	Isolator (Air break switch); size 200x200x6mm thick and 3.0m high; two-legged -Approx.500kg each.	No.	6		
E1	Surge Diverter Structure, size 150x150x6mm thick SHS and 2.40m long, two-legged -120Kgs each	No.	3		
F	66kV Terminal Gantry (Lattice) (2 vertical Gantries -9300.0m overall height and Horizontal Boom/Girder) -8.35m long - Approx.2000kg	No.	2		
G	Lighting mast structure - Aprox.365Kg.	No.	4		
H	Allow for concrete grouting finishes at fswitch gear foundations after KPLC erects steel structures	ITEM	1		
I	Supply and fix all galvanized steel bolts M28x1000mm long Including poring anchoring holding in position and allowing for all bolts nuts washers and bottom cleats.	No.	40		
J	Ditto but M25x650mm long	No.	240		
K	Allow factory visit Provisional sum of Kes. 750,000.00 for inspection and tests before, during and after, in workshop/factory fabrication and galvanization. All requird tests shall be carried out by client Inspection Team/Engineers to Accept/Reject every process, Quality, Workmanship etc before delivery to site as specified in Technical Specifications for steel structures, including all facilitation/transport and communication for 6no. (IAC members ,PE,PM)	ITEM	1		
					
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
CONTROL ROOM BUILDING					
A	Excavate 1.5m deep for strip foundation commencing from stripped level but not exceeding 1.5m deep.	CM	15		
B	Ditto but over 1.5m deep but not exceeding 3.0m deep.	CM	3		
C	Ditto but for column bases	CM	13		
D	Ditto but over 1.5m deep but not exceeding 3.0m deep.	CM	3		
E	Ditto but cable trenches	CM	3		
F	Extra over excavation for excavation in rock for all classes at any depth	CM	15		
G	Bacfill around foundations	CM	15		
H	Load and cart away the surplus excavated materials	CM	29		
I	Allow for all necessary planking and strutting.	ITEM	1		
J	Allow for keeping excavation free from general water.	ITEM	1		
Fair face formwork to: -					
K	Cable trench	SM	18		
L	Column footing	SM	11		
Concrete.					
Mass Concrete Class P as described.					
M	Plain concrete (1:4:8-20mm aggregates) in 50mm thick blinding for strip foundation	SM	9		
N	Ditto but to column bases	SM	9		
O	Ditto but to cable trenches	SM	7		
Vibrated reinforced concrete class 25/20 (1:2:4) as described in					
P	Strip foundation	CM	2		
Q	100mm thick Cable trench bed	SM	7		
R	Column bases	CM	1		
S	Columns footings/stubs	CM	1		
T	Ramp in door	CM	2		
High yield mild steel reinforcement bars including cutting, bending, spacers, tying wire and fixing to BS 4449 in, strip foundation, column base, footing and cable trenches.					
Strip foundation					
U	D8	KG	17		
V	D10	KG	34		
Column Bases					
W	D12	KG	66		
Column footings					
X	D12	KG	70		
Y	D8	KG	39		
Cable trenches					
Z	D 8	KG	47		
A ₁	225mm thick quarry natural stone bedded and jointed in cement and sand (1:3)mortar : 20 gauge x 25mm hoop iron in every alternate course	SM	45		
FILLING					
B ₁	Selected hardcore filling, compacted in layers of 150mm thick to make up levels to satisfaction of client	CM	19		
C ₁	50mm thick approved murrum blinding on hardcore fill.	SM	26		
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
A	Insecticide. Prepare and apply "Premise 200 SC " or equal and approved insecticide to surfaces of blinding as per manufacturer"s written instructions.	SM	32		
B	Damp Proofing. 1000 gauge polythene DPM laid on top of blinding including 200mm side and end lap	SM	32		
C	Mild steel bar to BS 4449; BRC mesh reference No. A142 weighing 2.22kg per square meter including 150mm minimum end and side lap,bends, tying wires and spacer blocks.	SM	32		
D	Vibrated reinforced concrete class 25/20 (1:2:4) as described in 150mm thick ground floor slab.	SM	24		
E	Sawn formwork to; Sides of ground floor slab 75-150mm high	LM	23		
F	Superstructures Damp Proof Course. 200mm wide dump proof course (DPC) laid with 1:3mix cement sand mortar.	LM	22		
G	Walling Approved natural dressed/ machine cut stone walling in cement sand mortar (1:3) including and reinforced with 20 SWG hoop iron in every two alternating course. 200mm thick smooth dressed natural stone wall/approved concrete blocks/Machine cut including making horizontal keys on external wall surface.	SM	66		
H	Allow to make 200mm diameter holes on superstructure walling to receiv PVC cable ducts(ms)	NO	12		
I	Fair face formwork to; Vertical sides of columns	SM	22		
J	Vertical sides of ring beam	SM	22		
K	Ditto but lintols	SM	4		
L	Ditto but lintel soffits	SM	2		
M	Ditto but soffit of suspended roof slab	SM	26		
N	Sides of roof slab 100-150mm high	LM	23		
O	Vibrated reinforced concrete class 20/20 (1:2:4/25) with fairly smooth face finish as described in: Columns	CM	1		
P	Ring beam & Lintels	CM	2		
Q	150mm thick roof slab	SM	32		
R	Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing. High tensile bars to BS 4461: 8mm to 12mm bars to: Ground beam D12	KG	135		
S	D8 Columns	KG	87		
T	D 8	KG	63		
U	D12 Beams & Lintels	KG	115		
V	D8	KG	125		
W	D12	KG	183		
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
A	Suspended concrete roof slab				
	D10	KG	342		
B	D8	KG	40		
	Roofing				
	Supply and fix fabricated steel 5 No.Trusses spanning 4500mm and hoisted height not exceeding 4.00m high above finished suspended floor slab as described;				
C	Trusses consisting of 50x50x4mm tie beam,rafters 50x50x4mm, struts and ties 50x50x3mm; all comprising of appropriate angle line cleats for purlin anchoring, to heights not exceeding 4m spanning 5.0m with weight not exceeding 100kg	NO	5		
D	Zed purlins made to Kenya Bureau of Standards specification KS EAS 134:2019 - size; 100x50mm deep	LM	48		
E	Allow for supply of 150x150x6mm thick plates, anchored on column ends with 4No. MS bolts, 200mm long to receive trusses.	NO	10		
F	Prepare and apply 2 coats of metal primer on roof metal structure/surfaces.	ITEM	1		
G	Supply and fix BP760 box profile factory pre-painted gauge 28 full length roofing sheets to an approved colour laid with 94mm side laps fixed to steel 'Z' purlin (m/s) including self driving screws, washers, nuts and rubber caps at 330mm centers.	SM	48		
H	Ditto but 28Gx480mm with stiffened ridge caps	LM	8		
I	Fabricate 1.0m high, SHS 40x40x4mm thick vertical parapet MS steel framework structure, RHS 40x25x3mm struts, including fixing into the wall with adequate wall passes as described to Engineer's approval to receive vertical box profile sheets (ms)	LM	27		
J	Ditto but eave framework (girth)	LM	25		
K	Supply and fix BP760 box profile factory pre-painted gauge 28 cladding sheets to an approved colour laid with 94mm side laps fixed to steel 40x40x4mm fascia cladding frame(ms) including self -tapping screws & washers and rubber caps.including underside of cladding	SM	30		
L	Ditto but horizontal eave covering	SM	13		
M	Ditto but in roof cable sides covering	SM	5		
	Rainwater Goods				
N	Purpose made 14 gauge box water gutter 900mm girth, srewed/welded to gutter stool on 50x25x3mm thick M.S fixed to rafters at 600mm centres; internally painted with two coats of black bituminous paint, externally with one coats of red oxide primer and two coats of finishing silver alluminium paint	LM	16		
O	Extra over for stopped ends.	NO	4		
P	Ditto for 110mm diameter holes in gutter.	NO	2		
Q	Extra over down pipe for swan neck	NO	2		
R	Supply and fix 110mm diameter PVC pipe connecting swan necks down pipe	LM	9		
	Painting generally.				
S	Prepare and apply 2 coats of red oxide primer and apply 2 coats of silver alluminium finish on rainwater goods	SM	6		
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Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
	Windows				
	Mediam duty anodized aluminium windows complete with all				
A	Window overall size 1500 x 1500 mm high; 2No. Sliding leaves	NO	4		
	Burglar proofing				
B	12mm Diameter round mild steel bars burglar grill welded to	NO	4		
	Window Cills				
C	200 x 150 x 30 mm thick concrete window cill, throated, one	LM	6		
D	Prepare and apply two coats of brick red paint	SM	2		
	Doors				
E	Double leaves steel doors 2000x3000mm high in two panels 600mm wide consisting of 1.6mm thick plate welded into 50x25x3mm frames; 75x50x6mm main frame with wall anchors; louvre lades into 500mm and bottom 1m depth all 1.6mm thick; -main entrance as per the drawing provided.	NO	1		
F	Ditto but one leave size; 1200x3000mm high.	NO	1		
G	Prepare and apply 2 coats of red oxide primer and apply 2 coats of matt finish paint on steel doors internal and externally.	SM	21		
	Finishes				
	Internal Finishes (Walling)				
H	13mm thick cement sand plaster (1:4) to walling mixed with lime smooth finish to receive paint (ms)	SM	101		
I	Prepare and apply three coats of emulsion 1st silk vily matt on wall plastered surfaces	SM	101		
	Flooring				
J	20mm thick cement sand (1:3) screed for floor to receive terazzo finish (ms)	SM	24		
K	30mm thick well polished terrazzo floor finish	SM	24		
L	Ditto but 150x20mm thick skirting	LM	27		
M	32x3mm thick plastic dividing strips.	LM	46		
	Internal Cable Finishes				
N	Provide 50x50x3mm angle iron embeded on the edges of cable trench with 10mm long insertion to receive chequer plate covers(ms)	LM	8		
O	Supply and fix 700x600x6mm thick chequer plate covers to cable trench including provision of adequate handles to ease lifting to client approval.	NO	15		
P	Prepare and apply 2 coats of red oxide primer and apply 2 coats of matt finish paint on steel doors internal and externally.	SM	13		
Q	Supply and fix 14 Gauge galvanized perforated steel cable trays; 300mm wide and 50mm deep including mounting on the trench on well secured hangers/support structure (ms) and all jointed by welds and bended as approprite to client satisfactory.	LM	9		
	Ceilling				
R	12mm thick cement/sand plaster finish to suspended concretete	SM	26		
S	Prepare and apply three coats of emulsion 1st grade emulsion	SM	26		
	Finishes Externally				
T	Prepare and apply three coats of external emulsion 1st grade paint	SM	41		
	Plinth Area				
U	15mm thick cement sand mortar(1:4) render to plinth.	SM	14		
V	Prepare and apply three coats of bituminous paint to plinth.	SM	14		
W	600x600x50mm thick precast paving blocks embeded on well compacted 50mm murrum, jointed with cement/sand mortar (1:4)	SM	57		
					
TOTAL CARRIED TO SUMMARY PAGE					

Item No.	Description	Unit	Qty	Rate	Amount (Kshs)
	<u>ELECTRICAL INSTALLATIONS WORKS</u>				
A	Allow for Electrical builders work to power supply points, consumer unit and distribution board lighting points;sockets; including chasing and making good all works as described	ITEM	1		
B	Allow for installations of all electrical work to be carried out by a nominated sub-contractor as per electrical drawing-lumpsum and to comprise of the following,1No.6 way 3-phase 415V distribution board rated 100Amps complete with 3 phase MCBS, 32Amps -2set and six 1Phase way MCBS 16Amps, all wires, fittings and LED lights to client approval.	ITEM	1		
	<u>SMOKE DETECTORS</u>				
C	Allow for Hardwired Smoke detectors installations; including a	ITEM	1		
D	Allow for general attendance on specialist contractor	ITEM	1		
E	Builder's work in connection with Smoke detector installations; cut away for and attend in all trades on the sub-contractor installing the following points in a mainly concealed system; including chases, holes and recess notching in timber etc; and making good all finishes for cut in boxes, electrical wiring, mounting brackets, smoke detector feeds, fire alarm points etc	ITEM	1		
	<u>FIRE EXTINGUISHERS</u>				
	<u>Supply and fix controlled discharge 9 litre water carbon dioxide gas fire extinguisher manufactured to BS EN 3-9:2006, Bs 7863:2009, BS 5306-4:2001and the cylinder manufactured to BS 5045 complete with the following:</u>				
F	Charge and fixing bracket;Pictorial instructions;Colour code;Servicable on site; discharge horn and hose;Brass hot stamping;Operating valve;Local Fire Brigade approval	NO	2		
G	Ditto but powder fire extinguishers	NO	2		
H	Ditto fire blanket 6' x 4' container	NO	2		
I	Supply and fix 450mm diameter extractor fan in the battery room	NO	1		
					
	TOTAL CARRIED TO SUMMARY PAGE				

SUMMARY PAGE

TOTAL BROUGHT FORWARD FROM PAGE 1
TOTAL BROUGHT FORWARD FROM PAGE 2
TOTAL BROUGHT FORWARD FROM PAGE 3
TOTAL BROUGHT FORWARD FROM PAGE 4
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TOTAL BROUGHT FORWARD FROM PAGE 9
TOTAL BROUGHT FORWARD FROM PAGE 10
TOTAL BROUGHT FORWARD FROM PAGE 11
TOTAL BROUGHT FORWARD FROM PAGE 12
TOTAL BROUGHT FORWARD FROM PAGE 13

SUB-TOTAL

ADD 16% VAT

TOTAL CARRIED FORWARD TO FORM OF TENDER

AMOUNT IN WORDS:

COMPANY NAME.....SIGN.....
STAMP.....

PROPOSED WORK DURATION IN WEEKS: 40 WEEKS

