



**PROPOSED CONSTRUCTION OF TRANSFORMER
REPAIR SHED AT KITALE DEPOT.**

TRANS-NZOIA COUNTY

BUILDER'S WORKS

Builders Works

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 1 PRELIMINARIES.</u>				
	<u>BILL NO. 2 TRANSFORMER REPAIR SHED KITALE.</u>				
	<u>ELEMENT NO 1. SUBSTRUCTURE (ALL PROVISIONAL).</u>				
	<u>Earth Works.</u>				
	<u>Excavation.</u>				
A	Excavate over site to remove vegetable soil and reduce levels average 150mm deep.	300	CM		
B	Ditto for strip foundation commencing from stripped level but not exceeding 1.50 m deep.	103	CM		
C	Ditto for column bases.	34	CM		
D	Ditto for column bases commencing from 1.5m deep but not exceeding 3.0m deep.	8	CM		
E	Level and compact foundation bases.	92	SM		
F	Load cart away surplus excavated material away from site.	27	CM		
G	Return, fill and ram selected materials around foundations.	118	CM		
	<u>Filling</u>				
H	Fill up excavation in approved hardcore hand packed to make up levels and compact mechanically in layers not exceeding 150mm deep.	105	CM		
I	Supply and spread to level 50mm thick quarry dust as blinding to hardcore surfaces. Rate to include surface treatment for vegetation.	230	SM		
	<u>Insecticide Treatment .</u>				
J	Prepare and apply "Premise 200 SC " or equal and approved insecticide to surfaces of blinding as per Manufacturer's written instructions.	230	SM		
K	Allow for all necessary planking and strutting.	1	ITEM		
L	Allow for keeping excavation free from general water.	1	ITEM		
	<u>Concrete Works.</u>				
	<u>Mass Concrete Class P as described;</u>				
M	Plain concrete (1:4:8-20mm aggregates) in 50mm thick blinding to columns and strip foundation bases.	92	SM		
	<u>Vibrated reinforced concrete class 20/25 1:2:4/25 as described in;</u>				
N	Stub column bases, columns and strip foundation.	30	CM		
O	150mm thick bed slab.	230	SM		
P	100mm Insitu paving.	42	SM		
Carried to collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing high tensile bars to BS 4461:</u>				
A	Assorted reinforcement in column bases, stub columns and strip foundation.	1100	KG		
	<u>Mild steel bar to BS 4449;</u>				
B	BRC mesh reference No. A142 including 150mm minimum end and side lap.	230	SM		
	<u>Sawn timber formwork to;</u>				
C	Vertical Sides of foundations and columns.	70	SM		
D	Sides of ground floor slab 150-225mm high.	59	LM		
	<u>Walling</u>				
E	200mm thick approved local natural stone walling ; chisel dressed;in cement sand (1:3) mortar and hoop iron in every alternate course.	210	SM		
	<u>Damp proofing.</u>				
F	200mm wide;bituminous felt base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar under the walls.	64	LM		
G	1000 gauge polythene DPM laid on top of blinding including 200mm side and end lap.	230	SM		
	<u>Plinth Area.</u>				
H	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external.	30	SM		
I	Prepare and apply three coats of bituminous paint to plinth.	30	SM		
Carried to collection					
	<u>COLLECTION</u>				
	Brought forward from page 1.				
	Brought forward from page above.				
Total for Element no. 1 Substructure carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 2 SUPERSTRUCTURE.</u>				
A	200mm thick dressed natural stone walling in c/s (1:3) mortar and hoop iron in ever alternate course.	55	SM		
Total for Element no. 2 Superstructure carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3 METAL FABRICATION WORKS(TRANSFORMER SHED FRAMEWORK) ALL PROVISIONAL. <u>All materials and workmanship shall confirm with the requirement of BS 449 and shall include all necessary cutting, welding, bolting, pinning, lugging and fixing, in approved metal primer and 2 finishing coats of 1st quality gloss paint all to Clients approval.</u> <u>Supply and fix;</u>				
A	305mmx127mmx42kg/M Universal Columns 12No. Stanchions each 5000 mm long(average).	2520	KG		
B	207x207x12mm thick I-Beam Section.	300	KG		
C	300 x 300 x 8mm as base plate welded to stanchion complete with angle cleats , 6mm fillet welded.	12	NO		
D	250x150x8mm as Stiffener Plates welded to stanchions and the base plates.	60	NO		
E	Ditto 19mm diameter X 381mm long H.D. bolts complete with nuts , flat washers and including anchor plates as necessary.	60	NO		
F	75x75x4mm thick metallic angle line and fabricate 5 No. trusses as per the attached detailed drawing including hoisting and fixing in position.	1520	KG		
G	Ditto and fabricate walling skeleton as detailed in the drawing to hold iron sheets cladding (m/s).	2000	KG		
H	100x50x2mm steel Z purlins.	310	LM		
I	12mm diameter solid mild steel round bar sagging rods.	130	KG		
J	100x100x6mm cleats welded to rafters(M.S).	80	NO		
K	40x40x4mm angle lines and fabricate fascia framework, on the gable sides sections only.	72	KG		
L	Supply and fix gauge 28 pre-painted IT4 profile sheets to an approved standard colour laid with 300mm side laps and 150mm minimum end lap fixed to Z purlins(ms) including J bolts, washers, nuts and rubber caps at 600mm centers.	310	SM		
M	Ditto in wall cladding fixed to the framework (m/s).	200	SM		
N	Ditto in ridge cap.	18	LM		
O	Supply and fix 300mm wide x 1.5mm thick mild steel plate on fascia framework(m.s) adb.	10	SM		
P	Supply and install Galvanized Cyclone Roof ventilators Super Eco 601 Rate to include materials required for such installation.	4	NO		
Total for Element no. 3 Metal fabrication works(Transformer shed framework) carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 4 RAIN WATER GOODS</u>				
	<u>Supply and fix 16 Gauge mild steel sheet welded to gutter stool; apply metal primer and finished with 2 coats of approved 1st quality of silver aluminium paint externally and black bituminous paint internally.</u>				
A	Purpose made box gutter 800mm girth.	27	SM		
B	25x25x1.5mm steel SHS stools welded to rafters at 1.5m centers and painted to match the existing.	20	LM		
C	Extra over for stopped ends.	4	NO		
D	Ditto for 100mm diameter holes in gutter outlets and projection.	4	NO		
	<u>Down pipes</u>				
E	150mm Diameter hollow section black pipe grade A well secured to steel columns with 3mm thick steel brackets at 600mm centers.	24	LM		
F	Extra over for swan neck.	4	NO		
Total for Element no. 4 Rain water goods carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5 OIL SUMP</u>				
A	Excavate commencing from stripped level but not exceeding 1.5m deep.	7	CM		
B	Ditto 1.5m deep but not exceeding 3.0m deep.	5	CM		
C	Return, fill and ram approved murrum around foundations.	1	CM		
D	Load cart away surplus excavated materials and dispose in areas designated by Council.	11	CM		
	<u>Concrete.</u>				
	<u>Mass Concrete Class X as described.</u>				
E	Plain concrete (1:4:8-20mm aggregates) in 50mm thick blinding to bed.	5	SM		
	<u>Vibrated reinforced concrete class 20/20 (1:2:4/25) as described in :-</u>				
F	Bed and walls of the pit.	5	CM		
	<u>Sawn timber formwork to;</u>				
G	Vertical Sides of Pit.	24	SM		
	<u>Reinforcement.</u>				
	<u>Steel reinforcement bars including cutting,bending, spacer blocks, tying wires and fixing.'High tensile bars to BS 4461;</u>				
H	Assorted reinforcement to foundation Bed and sides of pit.	300	KG		
Total for Element no. 5 Oil sump carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>ELEMENT NO. 6 METAL FABRICATION WORKS(TRANSFOMER WORKSHOP INTERNAL).</u></p> <p><u>All materials and workmanship shall confirm with the requirement of BS 449 and shall include all necessary cutting, welding, bolting, pinning, lugging and fixing,in approved metal primer and 2 finishing coats of 1st quality gloss paint all to Clients approval.</u></p> <p><u>UN-TANKING & TANKING BAY.</u></p> <p><u>Steel grating works.</u></p> <p><u>Fabricate and fix removable gratings in six parts,fabricated from 75 x 75 x 4mm steel angles framing and 50mm x 6mm steel flat sectionmain bearing at 30mm centers as described below;</u></p>				
A	Supply, fabricate and fix 75mm x 75mm x 4mm Steel Angle and fabricate framing as described before.	500	KG		
B	Ditto 50mm x 6mm Steel Flat as described before.	1300	KG		
	<p><u>OIL SUMP COVER(2400mm x 2000mm).</u></p> <p><u>Framing</u></p>				
C	Supply, fabricate and fix 75mm x 75mm x 4mm Steel Angle and fabricate framing as shall be described by client.	100	KG		
D	Ditto 40x40x4mm steel angles for intermediate framing .	80	KG		
	<p><u>Cover</u></p> <p><u>Supply and fix:</u></p>				
E	16Gauge steel plate welded on the framework as desribed before in items (F&G) and allow for 2No. Approved inspection covers.	5	SM		
	<p><u>TEST BAY,TEST BENCH & MECHANICAL BAY.</u></p> <p><u>Steel Safety Guard.</u></p> <p><u>Supply and fix 2000mm High steel safety guard with main Framing to be in 25 x25 x 4mm steel Angles and Intermediate framing in wire mesh cover all as shall be directed by the client and as described in below details:</u></p>				
F	40 x 40 x 4mm steel Angle in main frame and Intermediate framing in both Horizontal and vertical members ;	250	KG		
G	Welded Steel wire mesh 50mmx50mmx3.5mm fixed on framing as described(m.s)	70	SM		
Total for Element no. 6 Metal fabrication works(Transformer workshop internal) carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7 OPENINGS</u>				
	<u>Door</u>				
A	Supply and fix Composite purpose made mild steel sliding door;to slide on both sides ,with frame fabricated out of 25 x 25 x 4mm Steel Angle frame, complete with internal members fabricated out of 25 x 25 x 4mm Steel Angle frame, covered with welded steel wire mesh size 50mmx50mmx4mm, including sliding gear complete fixed at the top and sliding rails at the bottom Complete with approved heavy duty rollers:-Size 2400mmx2000mm Height.	2	NO		
B	Ditto but Double leaf door Size 1200mmx2200mm Height.	2	NO		
C	Supply, fabricate and fix heavy duty metallic sliding door size 4800x5000mm high overall as per the drawing schedule including the top and bottom railing, one priming coat and two coats of gloss oil paint window.	2	NO		
	<u>Timber doors.</u>				
	<u>45mm thick solid core flush doors :veneered both sides with Quality mahogany veneer and lipped on all edges in approved hardwood all round.</u>				
D	Door Size 900mm x 2100mm.	5	NO		
	<u>Wrot Cypress framed frames and framings.</u>				
E	200 x 38 mm; 4 No. labours; plugged door frame.	26	LM		
F	100 x 38mm architraves with 4 No. labours.	51	LM		
G	38 x 38mm quadrants with 3 No. labours.	51	LM		
	<u>The following for windows complete with grills.</u>				
H	Supply and fix Composite purpose made mild steel casement window frames out of 4mm thick steel T-Section Complete with approved: fixed 5mm clear glass in steel putty complete with all necessary Iron mongery Size 3000 x 2200mm High.	12	NO		
I	250 x 50mm thick precast concrete weathered and throated window cill , reinforced,finished fair face on all exposed surfaces,bedded and jointed in cement sand mortar(1:3).	52	LM		
	<u>Iron mongery.</u>				
	<u>Supply and fix the following to UNION catalogue or other equal and approved.</u>				
J	Two lever mortice lock complete with set lever brass handle furniture.	5	NO		
K	100mm steel butt hinges.	7	PRS		
L	Door closer as union or other equal and approved.	5	NO		
Total for Element no. 7 Openings carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 8 ALUMINIUM PARTITION(All Provisional)</u>				
	<u>Supply and fix Aluminium standard hollow sections;grooved as necessary;frames mitred at corners including reinforcing cleats;-</u>				
A	76x44x1.2mm thick aluminium hollow sections ;horizontals (middles, top & base) and Vertical members all grooved as necessary to receive board and / or glass panes.	13	LM		
B	Aluminium Beading; 25x25mm screwed as necessary (provisional).	32	LM		
C	Extra over ditto for supply and fixing 20mm thickrubber strip to PMs' Approval (provisional).	32	LM		
	<u>Glazing.</u>				
D	6mm thick laminated clear sheet glass; fixed to metal with aluminium connectors , beadings and rubber strips all (m/s) to the sides.	3	SM		
E	Aluminium sliding window of 900mmx 900mm complete with 6mm thick laminated clear glass including framing and all necessary accessories.	1	NO		
Total for Element no. 8 Aluminium partition carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 9. PLUMBING WORKS.</u>				
	<u>Piping and fittings -All Provisional.</u>				
	<u>Supply, deliver and install PPR tubing including fixing and jointing. Tenderer must allow in their pipework prices for all couplings, connectors, joints e.t.c as required in the running lengths of the pipework and also where necessary, for pipe fixing clips, holderbats plugged and screwed and pipe sleeves through structural members.</u>				
A	15mm diameter PPR tubing.	30	LM		
B	Ditto but 20mm ditto.	36	LM		
	<u>UPVC pipe.</u>				
C	100mm diameter UPVC pipe.	30	LM		
D	50mm Ditto.	12	LM		
E	100mm Ditto but bend ditto.	6	NO		
F	50mm Ditto.	4	NO		
	<u>Extra-over PPR tubing for the following:-</u>				
	<u>½ Inch fittings.</u>				
G	nipple.	2	NO		
H	union.	4	NO		
I	2ft Flexible tubes.	4	NO		
	<u>¾ Inch fittings.</u>				
J	nipple.	2	NO		
K	union.	4	NO		
L	Reducing bush ¾ by ½.	2	NO		
	<u>Sanitary fittings (Supply and install) all to clients' approval.</u>				
M	1st quality ½" Brass stop cock.	2	NO		
N	1st quality ½" Pillar tap long nose.	2	NO		
O	1st quality ½" Gate valve.	2	NO		
P	1st quality ¾" Gate valve.	2	NO		
Q	1st quality C.P Shower Head.	2	NO		
R	Chrome plated overhead shower arm with sliding flange.	2	NO		
S	38 mm. diameter bottle trap and waste complete with chain and plug.	2	NO		
T	Excavate trench from ground level for burried drain pipes not exceeding 1000mm and average 450mm deep, part return, fill in, ram and remainder cart away.	36	LM		
Carried to collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.</u>				
A	White low level WC suite comprising pan, heavy duty : plastic seat and cover,ceramic cistern,flush pipe trap; from 'twyfords' or other equal and approved;complete with all necessary accessories.	2	NO		
B	Range of two ceramic urinal bowls with automatic cistern,stainless steel piping and divider as per armitage shanks/Twyfords or equally approved connect to supplies and wastes complete with all necessary fittings and accessories. <u>Mirrors.</u>	1	SET		
C	6mm thick polished plate glass silver backed mirror with bevelled and smoothed edges, size 500 x 600mm x 6mm thick , and drilled four times at corners plugged and screwed to wall with mild screws chrome plated.	2	NO		
D	Approved Ceramic wash hand basin size 500x300mm fixed on galvanised round pipes brackets complete with 1No.approved12mm approved pillar tap.	2	NO		
E	150x150mm semi- recessed "Twyfords" white toilet roll holder.	2	NO		
Carried to collection					
	<u>COLLECTION</u> Brought forward from page 10 Brought forward from page above				
Total for Element no. 9 Plumbing works carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 10 STORAGE WATER TANKS.</u>				
	<u>Ground mounted Storage water tank & Steel deck.</u>				
A	Supply and install 10,000 litres capacity polyethylene moulded water storage tank as Roto or similar approved complete with 20mm diameter inlet and outlet connections, overflow pipes and connections and all requisite fittings; Bib tap on and including 2000x2000x150mm thick screeded V.R.C concrete 1:2:4 base slab with 10mm diameter bar reinforcement at 150mm c/c ; casted 300mm high above ground level on 600mm thick blinded hardcore filling in 200mm thick x1000mm high (minimum) masonry walling on 600 X 200mm thick V.R.C 1:2:4 strip footing reinforced with 10mm diameter mains and 8mmdiameter secondary bars , including all necessary excavations, disposal, backfilling & formwork.	1	NO		
B	Ditto but 2000 litre storage tank installed at approximately 5.0m High on steel deck m.s.	1	NO		
C	Supply and install 0.5 h.p. booster pump allowing for all plumbing and electrical connections to facilitate boosting of water to the hoisted tank apprx. 5M above the ground level.	1	NO		
D	Supply and install float switches to both ground and hoisted tank to control water flow allowing for all electrical wiring.	2	NO		
	<u>Steel Water Tank Tower and Deck.</u>				
	<u>Supply, fabricate and install steel water tank tower size 2000 x 2000 x 5000mm height above ground level all surfaces Primed and finished with 2coats 1st quality gloss paint, works to include:-</u>				
E	75x75x3mm SHS Posts.	32	LM		
F	75x50x3mm RHS Horizontal members and for decking platform.	46	LM		
G	50x50x3mm SHS Bracings.	50	LM		
H	25x25x1.5mm SHS for ladder & Top guard rail.	50	LM		
	<u>Excavation</u>				
I	Excavate pits to receive columns size 500x500mm by base of 1000x1000mm wide commencing from ground level and not exceeding 1.5m deep wheel and cart away.	5	CM		
	<u>Concrete</u>				
J	4No. 500x500mm x1000mm deep column with 1000x1000x300mm thick 1:2:4; reinforced concrete bases for the stand.	3	CM		
K	Reinforcement Bars ; assorted.	130	KG		
Total for Element no. 10 Storage water tanks carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 11 MASONRY GENERAL IN TEST BENCH,CLOAKROOM AND OIL SUMP				
	<u>Concrete.</u>				
	<u>In situ concrete; reinforced; class 20 / (20mm); 1:2:4; vibrated in: -</u>				
A	100mm thick Testbench worktop slab.	5	SM		
B	Ring beam.	2	CM		
	<u>Sawn timber form work to :</u>				
C	soffit of suspended slab.	5	SM		
D	Edges of worktop 75-150mm girth.	10	LM		
E	Sides of the beam 150-225mm girth.	60	LM		
	<u>Damp proofing</u>				
F	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar under walls.	30	LM		
	<u>Walling</u>				
G	200mm thick natural stone walling; machine -dressed, bedded and jointed in cement sand (1:3) mortar; reinforced with hoop iron at alternate courses.	80	SM		
	<u>Steel reinforcement Bars; high yield deformed steel bar; cold worked to B.S. 4461 and hot rolled to B.S 4449 including cutting, bends, hooks, tying wire, spacer block and fixing.</u>				
H	In assorted reinforcement of diameters (8,10 & 12).	126	KG		
	<u>FINISHES.</u>				
	<u>Wall finishes.</u>				
I	Plaster; 18mm thick, 2 No. coatwork, 15mm first coat of cement sand (1:3); 3mm second coat of cement and lime putty (1:9); steel trowelled to concrete or blockwork base generally to Walls, beams; internal.	320	SM		
J	Ditto but 15mm thick Cement and sand render externally.	80	SM		
	<u>Tile, Slab or Block Finishings.</u>				
K	Approved ceramic tiles ; white glazed wall tiles to regular or approved other pattern; bedding and jointing in cement sand (1:4) mortar, with grouting to approval 300x 100 x 6mm thick or equally approved size ; butt joints straight both ways; to cement sand base (m/s) to walls internal.	30	SM		
	<u>Beds or Backings.</u>				
	<u>Render; cement and sand (1:3).</u>				
L	15mm thick one coat backings; wood floated to receive ceramic tiles (m/s) to concrete or blockwork base; to walls internal.	30	SM		
Carried to collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Painting and decorations.</u>				
	<u>Prepare and apply one undercoat and three coats of first quality silk vinyl paint to: -</u>				
A	Plastered surfaces.	320	SM		
B	Prepare and apply 1st quality clear varnish to General surfaces of timber doors .	20	SM		
	<u>Floor finishes.</u>				
	<u>Terrazo with approved coloured aggregates.</u>				
C	40mm thick(25mm c/s backing and 15mm thick coloured terrazzo floor finish polished to approval with and including screed backing.	240	SM		
D	PROVISIONAL: 25 x 3mm plastic dividing strips cut to lengths and set vertically to screed to form margins with approved pattern.	230	LM		
	<u>Granite work tops.</u>				
E	Approved 20mm thick Polished granite slab ground smooth fixed to Test bench worktop.	5	SM		
	<u>Multi Compartment Powder coated Changing room Lockers.</u>				
	<u>Supply ,Fabricate and install steel changing lockers with 25x2x3mm angles main frame covered with 18gauge plate as described;</u>				
F	Overall measurements;- 1800 mm high x 532mm depth x 5000m long complete with all necessary framing, ironmongery, doors,lockable padbolts and necessary accessories each locker with double compartment to measure approx. 600mm Height x 325mm Width x 532mm Depth.	1	ITEM		
	<u>Working Drawings</u>				
G	Allow for preparation and approval of final set of working drawings in A1 size; using the attached drawings; all by a registered Architect & registered Structural Engineer including all necessary county government's approvals within the first two (2No.) weeks after contract signing.	1	ITEM		
Carried to collection					
	<u>COLLECTION</u>				
	Brought forward from page 13.				
	Brought forward from above.				
Total for Element no. 11 Masonry general in test bench, cloak room and oil sump carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.12 ELECTRICAL WIRING & FITTINGS.</u>				
	<u>Supply,Deliver to site, install,set to work and commision the following.</u>				
A	Lighting points completely wired in 3x1.5 mm single cable drawn in 20mm diameter heavy gauge conduit for two way switching couplers, sandle clips,circular boxes and switch boxes but excludng the fittings.	200	LM		
	<u>3x2.5mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc conduits including couplers and twin boxes excluding the socket outlets.(for SP sockets).</u>				
B	4x10mm single core pvc insulated copper cables drawn in 50mm diameter heavy gauge pvc conduits including couplers and twin boxes excluding the meter board & DB.	30	LM		
C	Protective multiple earthing comprising of 6.0mm pvc insulated cable drawn in 20mm heavy gauge conduits, 15mm by 1200mmlong copper eletrode with clamp and earthing manhole with inspection cover to KPLC Ltd by laws and statutory requirements.	1	ITEM		
D	45A DP cooker control point, completely wired in 3x4mm single core pvc insulated copper cables drawn in 20mm diameter heavy gauge pvc but excluding the cooker unit.	1	NO		
E	Cooker connector unit as MK. Or equivalent.	1	NO		
F	8 ways consumer unit complete with 100A integral isolator as MEM or equivalent excluding the MCBs and blanking plates.	1	NO		
G	12ways distribution board complete with rated integral isolator as MEM or equivalent excluding the MCBs and blanking plates.	1	NO		
H	Lighting fittings-1200mm 36W HPF single batten fluorescent luminaire complete with 18 watt LED tubes(frosted) as philips or equivalent.	20	NO		
I	Switches- 10A two gang two way switch as MK or equivalent.	6	NO		
J	Sockets-13A double socket outlet ditto.	12	NO		
K	Industrial Power Connector plugs and sockets ratings 220V-250V, 32A- 63A (1st quality English type).	1	NO		
L	Ditto but 380V-415V,63A-125A ditto.	1	NO		
Total for Element no. 12 Electrical wiring and fittings carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.13 BUILDERS WORKS IN CONNECTION.</u>				
	<u>Plumbing works.</u>				
A	<u>Cutting, chasing and making good to concrete for;</u>				
B	15mm diameter PPR pipes	22	LM		
C	20mm diameter ditto	29	LM		
D	100mm diameter UPVC pipe	15	LM		
E	100mm diameter bend	6	NO		
F	50mm diameter bend	4	NO		
G	50mm diameter urinal drainage pipes	6	LM		
H	150mm diameter for waste toilet pipes	2	NO		
	<u>Electrical Works.</u>				
	<u>Cutting, chasing and making good to concrete for;</u>				
I	20mm diameter heavy gauge conduit for lighting and socket wiring.	96	LM		
J	50mm diameter heavy gauge pvc conduit for meter board and distribution board.	20	LM		
K	20mm diameter heavy gauge conduit for cooker control point.	15	LM		
L	Cooker control point.	1	NO		
M	Consumer unit and distribution board	2	NO		
N	Lighting fitting points	20	NO		
O	Two gang two way switch	6	NO		
P	Double socket outlet	12	NO		
Q	Industrial socket point	2	NO		
Total for Element no. 13 Builders works in connection carried to summary.					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p style="text-align: center;"><u>SUMMARY</u></p> <p>Element no. 1 Substructure B/F from page 2.</p> <p>Element no. 2 Superstructure B/F from page 3.</p> <p>Element no. 3 Metal fabrication works(transformer shed framework) B/F from page 4.</p> <p>Element no. 4 rain water goods B/F from page 5.</p> <p>Element no. 5 oil sump B/F from page 6.</p> <p>Element no. 6 Metal fabrication works(transformer workshop internal) B/F from page 7.</p> <p>Element no. 7 openings B/F from page 8.</p> <p>Element no. 8 aluminium partition B/F from page 9.</p> <p>Element no. 9 plumbing works B/F from page 11.</p> <p>Element no. 10 storage water tank B/F from page 12.</p> <p>Element no. 11 masonry general in test bench, cloakroom and oil sump B/F from page 14.</p> <p>Element no. 12 electrical wiring and fitting brought B/F from page 15.</p> <p>Element no. 13 builders works in connection brought B/F from page 16</p>				
TOTAL FOR BILL NO. 2 TRANSFORMER REPAIR SHED KITALE CARRIED TO GRAND SUMMARY					

PC & Provisional Sums

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>BILL NO. 3 PC & PROVISIONAL SUMS.</u></p> <p><u>The following provisional sums are to be measured and priced in accordance with the rates contained in the Bill of quantities or pro-rata thereto or deducted in whole if not required;</u></p>				
A	Allow a provisional sum of kenya shilling one million, three hundred thousand only as a contingency sum to be expended under PM's instructions.		ITEM		
TOTAL FOR BILL NO.3 PROVISIONAL SUMS CARRIED TO GRAND SUMMARY.					

GRAND SUMMARY

PROPOSED CONSTRUCTION OF TRANSFORMER REPAIR SHED
AT KITALE DEPOT

GRAND SUMMARY

BILL NO.	DESCRIPTION	Page No.	CONTRACTOR'S USE		OFFICIAL USE	
			K.SHS.	CTS.	KSHS.	CTS
1	PRELIMINARIES	PAGE 10				
2	BUILDER'S WORKS	PAGE 17				
3	PC & PROVISIONAL SUM	PAGE 1				
	SUB-TOTAL					
	ADD 16% VAT					
GRAND TOTAL CARRIED TO FORM OF TENDER.						