	PROPOSED CIVIL WORKS AT SAGANA 33/11 KV SUBSTATION				
	BILL OF QUANTITIES				
	ELEMENT NO. 1				
ITEM NO.	**DESCRIPTION**	**UNIT**	**QTY**	**UNIT RATE**	**AMOUNT**
1	**Preliminaries**				
A	Allow for a temporary site office adequate to accommodate ten persons, notice board, shelves, and store for materials and tools storage : MIN 10m x 5m	ITEM	1		
B	Allow for clean water for the works	ITEM	1		
C	Allow for all the necessary statutory approvals for the works, drawings, by relevant County Government authorizaties, replication of drawings to required formats, endorsement by relevat proffessional persons and submit drawings to client before work commencement.	ITEM	1		
D	Allow for temporary sign post for the proposed works and permanent sign post as described.	ITEM	1		
E	Recover existing fence and hand over to client and secure as per KPLC desiganated store/ location/area and reuse 50m of the chainlink and its post and fixing as required.	ITEM	1		
F	Allow for security and insurance for the proposed works	ITEM	1		
G	Allow for keeping all excavations water free by pumping,bailing or otherwise.	ITEM	1		
H	Allowfor testing of all materials at the ministry of works and provide for the certificate before the use of the material.	ITEM	1		
I	Allow for supply of power connection for use for the works.	ITEM	1		
J	Allow for a qualified personel conversant with Kenya Power safety regulations for the entire contract period	ITEM	1		
K	Allow for prompt communication and updates facilitation to client supervision team	ITEM	1		
L	Allow for temporary toilet for the workers and to be recovered after completion of the works.	ITEM	1		
M	Allow for National Construction Authority (NCA) Project registration fee for onward submission on behalf of the clients. This is 0.5% of the value of contract.(at summary page)	ITEM	1		
	ELEMENT NO. 2				
	CIVIL WORKS				
1	**Switch yard**				
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
A	Clear working area/site of existing ballast,rubbles,shrubs and any other vegetation including burning and carting away the arising.	SM	1950		
B	Excavate/Scoop top vegetable soil average depth 200mm and cart way to local authority designated damping site	CM	400		
C	Backfill in layers average 1000 mm thick selected well compacted imported and approved murram/gravel fill, compacted in layers of 150mm thick using a plate compactor to receive ballast to gradual slope terminating at srorm drain	CM	1950		
D	Prepare and apply Gradiator 4TC or equal and approved insecticide to surfaces of blinding as per Manufacturer's written instructions	SM	1950		
E	Apply suitable and approved weed killer, herbicide to surfaces of blinding as per the Manufacture's written instructions and guarrantee and provide a copy to client.	SM	1950		
F	1000 gauge polythene or other equal and approved mebrane laid on compacted and treated surface with welted laps of 200mm wide.	SM	1640		
G	Supply and spread uniformly 150mm thick 1inch (1") ballast in switchyard	SM	1640		
H	Provide 150x250mm high precast concrete or insitu channel along the edges of invert drain block to secure from falling ballast.	LM	186		
2	***ACCESS ROAD AND PARKING AREA***				
A	Excavate for access road depth not exceeding 500mm and cart away the spoil	CM	295		
B	Backfill with selected well compacted hardcore fill, compacted in layers of 150mm thick using 10 tonne vibrating roller to receive paving blocks	CM	400		
C	50mm thick approved and well compacted quarry dust blinding on hardcore surfaces	SM	580		
D	Heavy duty industrial concrete paving blocks size (210x105x80mm) minimum strength 49N/mm square laid to slope on quarry dust and compacted	SM	580		
E	125 x 250 mm Splayed kerb to BS 340 including 125 x 100 mm channel on and including concrete Class 'E' foundation and 100 mm haunching to back of a kerb including all necessary excavation, formwork and disposal.	LM	155		
F	Ditto curved to plan.	LM	30		
G	Extra over for junction between straight and curved kerbs.	NO	12		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	GRAVELLING (Access road)-entry				
H	Excavate commencing from stripped level depth not exceeding 900mm deep for piped culvert and cart way the spoil	CM	8		
I	50mm thick plain concrete blinding to make up levels for the precast culvet	SM	15		
J	Supply and install 600mm internal diameter concrete pipe culvert and headwall as per drwg.	LM	16		
K	Vibrated mass concrete class 20/25 (1:2:4) in culvert surrounding thickness 200mm including head and wing wall	CM	20		
L	Excavate commencing from ground level 6metres wide access road and not exceeding 300mm deep and cart way the spoil	CM	73		
M	Hand pack and compact hardcore to external road section to main road	CM	73		
N	Approved murrum fill well compacted with vibratory rollers in 150mm thick layers to above road to engineers approval	CM	73		
O	50mm surfacing of entry road with APPROVED gravell	SM	240		
	ROAD MARKING				
	Prepare surfaces and apply three coats of approved road marking paint: to				
A	Kerb stones and parking 75 to 150mm girth with Kenya Power branded colours.	LM	150		
	Cable ducts				
B	Supply and install 150mm diameter medium gauge PVC pipes as ducts for cables crossing the access road and control room cable trench entrance location.	LM	48		
C	Vibrated mass concrete class 20/25 (1:2:4) in pvc cable ducts surrounding.	CM	3		
2	**SWITCH YARD PLINTHES**				
	Switchgear Foundation plinthes for the conversion of following 33kv KPLC wooden structures steel , to +150mm on new proposed bay consisting of 6nos 33KV &11KV busbar plinths-15nos,33kvA/B switches, 2Nos.CBs plinthes, 10nos.33kvCTs, 9nos. 33kv VTS & 2nos.11KVA/B switch structure-2 legged; 33kv terminal post,5No. 33kv CB,4nos lightening arrester plinthes, 2No. bus section switch,16no.post insulator-2 leged ; 2nos.NCT, as per the General arrangement drawing(GA) and all to structural engineers details.				
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
A	Excavate foundation pits commencing from reduced level but not exceeding 1.5 m deep	CM	150		
B	Ditto but not exceeding 3.0metres	CM	43		
C	Backfill and ram selected excavated material around foundations	CM	68		
D	Cart away surplus excavated materials from Site to municipal council desiganated damping site.	CM	30		
E	Disposal of water and Strutting	ITEM	1		
F	Blinding mix (1:4:8 - 50 mm)	SM	138		
G	Class 25(20) in foundations	CM	50		
H	Class 25(20) in stub col bases with face finishes	CM	80		
I	High yield reinforcement bars diameters 8 to16mm to bases and column	KG	5795		
J	Shuttering to columns stubs	SM	80		
K	Edges; 75 to 250 mm to plinths	SM	53		
L	grouting bolts /inserts and the like by holding in position when pouring concrete not exceeding 600mm long-bolts supplied by client	NO	424		
M	13mm thick plaster (1:3mix) to top surface of foundations with smooth finish trowelled	SM	53		
N	Attendance for KPLC staff to do earthing before all blinding including security for all copper strip edges	ITEM	1		
	CABLE TRENCH				
	Trench (600x600mm deep) length approx.145 metres at various locations				
A	Excavate for trench from reduced level not exceeding 1.5 metres deep and cart away	CM	110		
B	Load, cart away from site excavated materials and dispose at areas designated by local authority.	CM	110		
2	***Trench bed***				
C	50mm plain concrete(1:4:8) blinding on cable trench	SM	132		
	Vibrated reinforced concrete class 20/20 1:2:4 as described in;				
D	150mm thick trench base	CM	20		
E	150mm thick trench walls with fair face finish	CM	30		
F	150mm thick plain concrete haunching on laid 150mm diameter PVC cable ducts on road crossing.	CM	2		
G	Supply and lay 150mm diameter medium gauge PVC ducts	LM	48		
	Smooth formwork to				
H	Sides of trench wall	SM	350		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Steel reinforcement bars including tying bending				
	spacer blocks tying wires and fixing high tensile				
	bars to BS 4461				
I	Y 8mm at 150 centres in cable trench	KG	2300		
	Precast concrete trench covers				
J	Provide and fix heavy duty galvanised (900x450x50mm) composite polymerresin cover (medium weight/m2 ultimate load capacity).	NO	495		
	Cable trays				
K	Supply and fix steel fabricated cable trays from 50x50x4mm thick angle iron frame, jointed together with 50x50x4mm thick galvanized flat iron bar to 600mm long pcs and place on top of angle iron spaced at 400 C/C to form cable tray and with 200mm high vertical trainglurar support stand spaced at 400mm C/C.	LM	145		
L	Fabricate and fix standard primary substation gate with 16 gauge black sheet panels welded on 50x50x4mm square tubes and 75x75x4mm frame with 50mm diameter 6No. bushess as per the drawing SK. No.07044/B including excavation for the gate columns, concrete works,erection and 3 coats of 1st grade gloss paint .	NO	1		
M	Ditto but pedestrian gates	NO	1		
	Trench (1200x1200mm deep) length approx.210 metres at various locations for power cables.				
A	Excavate for trench from reduced level not exceeding 1.5 metres deep and cart away	CM	300		
B	Ditto but 900mm wide and 900mm deep for PVC cable ducts	CM	13		
C	Load, cart away from site excavated materials and dispose at areas designated by local authority.	CM	300		
2	***Trench bed***				
D	50mm plain concrete(1:4:8) blinding on cable trench	SM	280		
	Vibrated reinforced concrete class 20/20 1:2:4 as described in;				
E	150mm thick trench base	CM	45		
F	150mm thick trench walls with fair face finish	CM	80		
G	150mm thick plain concrete haunching on laid 150mm diameter PVC cable ducts	CM	5		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
H	Supply and lay 150mm diameter medium gauge PVC ducts	LM	96		
	Smooth formwork to				
1	Sides of trench wall	SM	1030		
	Steel reinforcement bars including tying bending				
	spacer blocks tying wires and fixing high tensile				
	bars to BS 4461				
J	Y 8mm at 150 centres in cable trench	KG	5451		
	Precast concrete trench covers				
K	Provide and fix heavy duty galvanised (1500x450x50mm) composite polymerresin cover (medium weight/m2 ultimate load capacity).	NO	150		
	Cable trays				
L	Supply and fix steel fabricated cable trays from 50x50x4mm thick angle iron frame, jointed together with 50x50x4mm thick galvanized flat iron bar to 600mm long pcs and place on top of angle iron spaced at 400 C/C to form cable tray and with 200mm high vertical trainglurar support stand spaced at 400mm C/C.	LM	210		
4	**1X23MVA TRANSFORMER PLINTH**				
A	Excavate pit foundations not exceeding 1.8metres deep from reduced levels	CM	55		
B	Cart away from site surplus excavated materials	CM	55		
C	Plain concrete 50mmm thick blinding 1:4:8 to footing	SM	35		
	Vibrated Reinforced Concrete Class 25/20 mm Aggregate in:-				
D	Base	CM	10		
E	PEDESTALS	CM	16		
F	COVER SLAB-300mm thick	CM	18		
	High Tensile Steel Reinforcement Bars; Cold Worked to BS 4461 (Provisional)				
G	8 mm diameter	KG	200		
H	12 mm diameter	KG	2550		
	Fairface Formwork to:-				
I	Sides of base 225-300mm wide	LM	15		
J	Ditto slab	LM	16		
K	Vertical sides of footing	SM	24		
	Hardcore filling				
L	Approved hardcore filling compacted to Engineer's approval	CM	12		
M	Blind surface of hardcore with lean concrete	SM	23		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
N	1000 gauge polythene sheet laid over hardcore	SM	23		
	SUMP RCC WALLING				
	Mass insitu concrete (1:4:8) in:-				
A	Strip footing	SM	16		
	Vibrated Reinforced Concrete Class 25/20 mm Aggregate in:-				
B	Base	CM	9		
C	Walling finished fair face	CM	10		
	Formwork				
D	Vertical sides of base	SM	50		
E	Vertical sides of walling	LM	56		
	High Tensile Steel Reinforcement Bars; Cold Worked to BS 4461 (Provisional)				
F	8 mm diameter	KG	300		
G	10 mm diameter	KG	400		
H	Supply and fix fabicated heavy duty grating with deformed R16 bar at 10mm centres, welded on 50x50x4mm angle lines anchored to contrete with 10mm inserts; well primered base coat and final zinc- chromate paint to cover the transformer oil spillage sump.	ITEM	1		
I	OIL sump chamber 2m x 5m x 2m deep; perimeter 200mm thick block walling; internal plaster complete with niru finish; with ring beam at every 2m interval 250x200mm with 4 nos.12mm bars and 8mm shear links at 200mm spacing; cover slab with manhole opening 150mm reinforced with 8mm steel bothways at 150mm spacing; heavy duty steel cover; including pvc pipe 4"connecting with the main transformer pit not exceeding 6m away.-in two compartments	ITEM	1		
K	Provide galvanized 125 x 75mm U Channels welded to triangular shape (1.5x1.2x1.9metres); placed in reinforced concrete size, 1.0x1.0metres), with approx. of the tip exposed above the concrete, including 50mm diameter hole drilled on exposed section.	NO	2		
	ELEMENT NO.3-BUILDING WORKS				
	CONTROL ROOM 24M X 10M				
A	Excavate oversite vegetable soil average depth 150mm and cart away.	SM	280		
B	Excavate for strip foundation trench 1m wide commencing at reduced level and not exceeding 1.5m deep.	CM	190		
C	Ditto exceeding 1.5m but n.e 3m.	CM	81		
D	Excavations for column base size (1.5x1.5)m	CM	71		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
E	Ditto exceeding 1.5m but n.e 3m.	CM	71		
F	Extra over excavation for excavating in hard rock	CM	7		
G	Allow for keeping all excavations water free by pumping,bailing or otherwise.	ITEM	1		
H	Fill in and ram selected imporrted materials around foundations and column bases.	CM	150		
I	Load cart away surplus excavated materials and dispose in areas designated by local authority	CM	81		
J	400mm thick bed of selected hard-core well compacted in layers n.e 150mm thick blinded with fine material 50mm thick to receive damp proof membrane (m.s)	CM	115		
K	150mm thick approved murram blinding well compacted,watered and rolled to client satisfactory	CM	43		
L	Gladiator 4TC or equal and approved insectiside treatment to hardcore blinded surface and around entire building.	SM	288		
M	1000 gauge polythene or other equal and approved membrane as DPM laid on top of blinded hardcore (m.s) with welted laps of 200mm wide.	SM	260		
N	50mm thick plain concrete (1:4:8) blinding in strip foundation and columns bases	SM	145		
	Vibrated reinforced class20/25 1:2:4/25 as described in:				
O	Strip foundation (600x250)mm	CM	18		
P	Column bases size (1000x1000x250)mm	CM	10		
Q	Columns footing size (250x250)mm	CM	3		
R	150mm thick concrete slab on damp proof membrane(m.s)	SM	260		
	High yield mild steel reinforcement from 8mm to 12mm including cutting, bending, spacers, tying wire and fixing to BS 4460 in, strip foundation, column base, footing and cable trenches.				
S	Y 12	KG	500		
T	Y 10	KG	350		
U	Y8	KG	370		
V	Steel wire fabric mesh reinforcement to B.S.4483 Ref BRC No.A142 in concrete bed (M.S) including 200mmlaps ,all necessary trying wire and supporting as required.	SM	260		
	Sawn formwork to;				
W	Sides of column bases girth not exeed 250mm	LM	90		
X	Sides of column size 250 x 250mm	SM	75		
Y	Sides of strip foundation,200mm high	LM	245		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
Z	Sides of floor slab 150-200mm girth	LM	75		
	Foundation walling				
A	225mm thick approved natural stone walling bedded and jointed in morter (1:3)	SM	207		
	CABLE TRENCH				
	Trench 1200mm wide x1200mm deep-length 100metres at veroius locations.				
B	Bulk excuvation for trench 1.8m wide from reduced level not exceeding 1.2m deep.	CM	230		
C	Load cart away surplus excavated materials and dispose in areas designated by local authority	CM	230		
D	Fill in and ram selected backfill materials around trench.	CM	120		
	SUNDRIES				
E	Make holes on 200mm masonry wall and 150mm thick concrete cable trench wall for 200mm diameter heavy duty PVC cable ducts.	NO	40		
F	Provide and lay 200mm diameter heavy duty PVC ducts average length 2000mm including haunching with 150mm thick (1:3:6) concrete.	NO	40		
G	Ditto but 150mm	NO	18		
H	Ditto but 100	NO	12		
	Trench bed				
I	50mm thick plain concrete (1:4:8) blinding in cable trench bed 1.5m wide.	SM	150		
	Vibrated reinforced concrete class 20/20 1:2:4/20 as described in;				
J	In 150mm thick trench base with smooth steel finish	CM	30		
K	In 150mm thick vertical walls	CM	40		
	Fairface formwork to				
L	Sides of trench wall	SM	260		
	Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing. High tensile bars to BS 4461: 8mm bars to:				
M	Y8mm in cable trench	KG	3832		
	Trench (600x600mm deep)length 60meter				
N	Excavate from reduced level not exceeding 1.5x0.8m wide	CM	80		
O	Load cart away surplus excavated materials and dispose in areas designated by local authority	CM	80		
P	Fill in and ram selected imporrted materials around the trench.	CM	30		
	Trench bed				
Q	50mm plain concrte(1:3:6)blinding cable trenches bed	SM	60		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Vibrated reinforced concrete class 20/20 1:2:4/20 as described in;				
S	In 150mmthick trench base	CM	10		
T	In 150mm thick vertical walls	CM	15		
	Sawn formwork to;				
U	Sides of trench walls	SM	150		
	Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing. High tensile bars to BS 4461: 8mm bars to:				
V	Y8mm in cable trench	KG	936		
W	50X50X4mm angle line embedded in concrete cable trench edges.	LM	160		
	Chequered plate cover(internal cable trenches)				
X	1200x400mmx5mm thick chequered plate covers reinforced with 40x40mmx3mm thick SHS all around primed and apply 3 coats of first quality gloss paint.	NO	60		
Y	50mm plain concrte(1:3:6)blinding cable trenches bed	SM	60		
	ELEMENT 2-SUPERSTRUCTURE WORKS.				
1	**Walling.**				
A	Pluvex No.1 or other equal and approved bituminousdamp proof course to B.S.743.225mm wide under walling(m.s)including for 200mm long laps (measured net no allowance included for the laps)	LM	122		
B	225mm thick approved smooth hand dressed natural stone/machine cut stone walling in cement morter (1:4)including for hoop iron in every alternate course.	SM	549		
	Vibrated reinforced concrete class 20/20 1:2:4/20 as described in;				
C	In columns size 250x250mm	CM	8		
D	In ring beam and upstand size 450-600x200mm	CM	15		
E	In 150mm thick suspended slab	SM	260		
E	In lintols 300x200mm	CM	1		
G	Concrete ramp	CM	1		
	Steel reinforcement bars including cutting, bending, spacer blocks, tying wires and fixing. High tensile bars to BS 4461 in upstand ringbeam and slab.				
H	Y8mm	KG	159		
I	Y10mm	KG	819		
J	Y12mm	KG	3156		
K	Y16mm	KG	288		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Sawn formwork to;				
L	Sides of the soffits of ring beam	SM	288		
M	Sides of the column	SM	132		
O	Soffits of the suspended slabs	SM	260		
	ELEMENT 3-ROOF CONSTRUCTION AND COVERING				
	The following in 7no.trusses spanning11.00m and hoisted 4m high above finished floor level				
A	100x50x6mm rolled steel RHS in rafters	LM	160		
B	Ditto 50x50mm in struts	LM	130		
C	Supply and fix in concrete ring beam 28no.16mm bolts	ITEM	1		
D	(200X200X6mm)thick M.S plate cleats with 2no. Holes welded to truss.	NO	16		
E	Supply and erect MS purlins cleats to truss at 1800cc	NO	92		
F	Supply and erect 150x51x2mm Z purlins bolted to rafters primed with one coat of red oxide	LM	288		
G	Gauge 26 pre-painted IT 5 roof covering sheet including for 2no. Side corrugations and 300mm long end laps	SM	280		
H	Ditto for side cladding-ALL 4 sides and gables-1.2m deep	SM	150		
I	26 gauge matching ridge cap	LM	45		
J	50x50x6mm RHS fascia support	LM	23		
K	50x50x6mm angle iron fascia support	LM	138		
L	Supply and fix cleats welded to fascia support	NO	32		
M	26 gauge 100x100mm corner edging	LM	138		
N	14 gauge galvanised M.S in gutters	LM	52		
O	Extra over for stopped ends	NO	4		
P	Ditto for 100mm outlet	NO	9		
Q	50x50mm thick timber bearers	LM	81		
R	100x50mm thick timber cornice	LM	81		
	Down pipes				
S	100mm down pipes 24gauge secured to wall with brackets at 900mm c/c	LM	35		
T	E.O for sawn neck	NO	9		
U	Prepare surfaces,prime and apply two coats of first quality aluminium paint to rainwater goods	ITEM	1		
	Windows				
	Composite purpose made fixed glass steel casement window frame made out of (50x25x3mm thick) RHS,Z-sections and flats complete with fixed glass in approved putty,stays and fasteners all to clients approval.				
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
A	Fixed glass window size (1200x1500mm)high overall	NO	12		
B	Ditto size(1000 x 1500mm)	NO	3		
C	Windows size (450 x 600mm) high overall	NO	2		
D	Ditto size (600 x 1000mm) high overall	NO	2		
E	Fixed glass window size (900x1000mm)high overall	NO	1		
F	Fixed glass window size (1200x1200mm)high overall	NO	1		
G	6mm thick clear glass in steel putty	SM	35		
H	Supply and fix clay window cill,beded and joined in cement/sand(1:3) motor,pointed in matching coloured cement windows	LM	35		
	Doors		35		
	Purpose made steel casement double leaf door divided into equal leafs made out of 75x50mm frame with four parmanent louvred ventilation made from (25x3mm)flat bars whole door hinged to and including (100x100x6mm) angle line build to wall with brackets in sizes see drawing SK No.06249 sheet 1 all fitted with panic locks.				
A	Door size (1800x3000mm)double leaf	NO	2		
B	Door size (1800x3000mm)single leaf light weight standard	NO	8		
C	Supply and fix approved panic locks	NO	4		
D	Three lever mortise locks	NO	8		
E	38mm rubber door stopper	NO	8		
F	100mm steel butt hinges	NO	24		
G	Supply and fix emergency panic lock complete with all the necessary ironmongery	NO	4		
H	250mm long x 25mm x1mm thick fixing clamps	NO	48		
I	Allow for priming all metal and flash doors surfaces and apply two coats of 1st quality to all doors and frames.	SM	173		
	ELEMENT 4-FINISHES				
	Finishes				
A	25mm thick cement sand screed prepared	SM	240		
B	Ditto for ceramic	SM	58		
C	TERRAZZO paving to floors	SM	220		
D	100mm thick skirting ditto	LM	250		
E	32 X 3mm thick plastic dividing strip	LM	180		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
F	12mm thick internal quality lime plaster finished smooth with steel trowel to all walls and suspended slab	SM	929		
G	Supply and fix approved ceramic floor tiles on screed,joints pointed in matching cement grout to approval.	SM	36		
H	Tile skirting of 150mm wide	LM	55		
I	Key pointing to external walls using morter	SM	350		
J	12mm plaster to window and doors head,cill and jambs 200-300mm girth	LM	45		
K	Prepare surfaces and apply and 2 coats of 1st quality silk vinyl emulsion paint to plastered walls internally and selected external areas and concrete surfaces.	SM	750		
L	Prepare surface, apply undercoat and 2 coats of 1st quality silk vinyl emulsion paint to plastered surfaces 200-300mm girth.	LM	115		
M	200 x 250mm wall tiles bedded in cement grout pointed in colour cement to match colour of tiles.	SM	58		
N	Ditto 300x300mm floor tiles	SM	25		
	Plinth Area				
O	12mm thick sand/cement (1:3) rendering finish plinth area	SM	42		
P	Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint on rendered surfaces to	SM	42		
2	***kitchen***				
A	100mm thick 1:2:4 concrete in kitchen work top	SM	6		
B	Y10 reinforcement bars at 200c/c	KG	230		
C	150mm block wall	SM	23		
D	12mm 1:3 cement sand plaster	SM	69		
E	single drain single bowl stainless sink	NO	1		
F	Bricon or approved kitchen mixer	NO	1		
G	All for 3000 x 600 x 100mm thick concrete work top,finish in 600 x 600mmpolished granito tiles.	SM	3		
H	5No. 800x600mm low level lockable block board cabinets all vineered to clients approval	ITEM	1		
I	Ditto but overhead 3 No. cabinets	ITEM	1		
3	**ELEMENT 5-DRAINAGE AND PLUMBING WORKS**				
	Plumbing works				
A	Twyfords Hindustan vitreous china wash hand basin size 500x400mm fixed on semi-concealed brackets.	NO	2		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
B	Ref. No.1200 complete with 2No.Approved 12mm. Chrome plated taps	NO	2		
C	150x150mm semi-recessed "Twyfords" white toilet roll holder	NO	2		
D	White Twyfords classic WC suite comprising pan,heavy duty plastic seat and cover,ceramic cistern,flush pipe and trap.	NO	2		
E	Supply and fix compact auto dryer satin chrome 2.2KW	NO	2		
F	12mm gate valve as per peglar	NO	9		
G	Ditto 15mm	NO	9		
H	15mm class B pipes including all necessary fittings including all the necessary excavations and chasing in wall.	LM	173		
I	12mm class B pipes including all necessary fittings including all the necessary excavations and chasing in wall.	LM	230		
J	600 x 600 x50mm thick paving slabs on 50mm thick quarry dust blinding;jointed with cement sand (1:3) morter;laid to approved pattern around all buildings	SM	82		
	ELEMENT 6-FIRE EXTINGUISHER,ELECTRICAL INTALLATIONS AND SMOKE DETECTORS				
	1-FIRE EXTINGUISHERS				
A	Supply and fix controlled discharge 9 litres carbon dioxide gas fire extingisher manufactured to BS EN 3-9:2006,Bs 7863:2009,BS 5306-4:2001 and the cylinder manufactured toBS 5045 complete with the following:	NO	6		
	Charge and fixing bracket				
	Pictorial instructions				
	colour code				
	Servisable on site				
	Discharge horn and horse				
	Brass hot stamping				
	Operating valve				
	Local Fire Bridge approval				
	Ditto fire blanket 6" x 4" container	NO	4		
	Ditto Dry powder	NO	6		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	PRIME COST SUM				
	ELEMENT No.2-ELECTRIAL INSTALLATIONS				
A	Allow for electrical installations to be carried out by a nomited subcontractor as per electrical drawing-lumpsum and to comprise the following, 2No.12 way 3-phase 415V distribution board rated 100Amps complete with 3 phase MCBS,32Amps-2set and six 1 phase way MCBS 16Amps.	ITEM	1		
B	Ditto 1 No. consumer unit rated 60Amps,6ways each MCBS rated 16Amps.	ITEM	1		
C	Builders work in connection with electrical 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 racess notching in timber etc;and making good all finishes for sockets,lighting points,consumer units etc.	ITEM	1		
D	Supply and install 420V AC Autochangeover distribution panel(As per document No.KP1/6C.1/13/TSP/09/092)	ITEM	1		
E	Allow for installation of flood light for street lighting for the substation switchyard,240V AC,energy saver 100watts.	NO	8		
	ELEMENT No.2-SMOKE DETECTORS				
A	Allow for Hardwired smoke detectors installations;includting a battery back up;to be carried out by a nominated sub-contractor	ITEM	1		
B	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		
	ELEMENT NO. 4 - AIR CONDITIONING				
	Air conditioning				
	Supply and fix air conditioners complete with all fixing accesories to controll room temperartures from approved suppliers				
A	18000 BTU split type	NO	1		
B	12000 BTU split type	NO	2		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	WATER SUPPLY				
A	Allow for all the connections of the available water to the raised installed overhead water tank and teste.	ITEM	1		
B	Supply and install 6000 litres an approved plastic water tank, approved 3/4" watertap and concrete platform including all nacessary required fittings and connections	ITEM	1		
	External Works				
	Vibrated reinforced concrete class 20/20 (1:2:4/20) in;				
C	concrete ramps at the doors	SM	10		
	Mild steel bar to BS 4449;				
	Total carried to summarry				
D	BRC mesh reference No. A142 weighing 2.22kg per square metre including 150mm minimum end and side lap,bends, tying wires and spacer blocks	SM	10		
E	600x600x50mm thick precast paving blocks embeded on well compacted 50mm murram, jointed with cement/sand mortar (1:4)	SM	280		
	SUBSTATION LIGHTING				
F	Supply 240 watt AC (LIGHT DEPENDENT TYPE) bucky head floodlight with energy saver 100 watts sodium metal halide lamps to be hoisted on mast supplied by kplc including all connections	ITEM	1		
G	supply and fix emergency chargeable lights in the control room to client approval.	NO	2		
	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	225		
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	180		
C	Supply and lay on sides of sloped trench (75x230mm wide) precast concrete slabs jointed in 1:3 cement sand mortar	SM	190		
D	Stone pitching with bedding in 1:2 motar with to terminate at drains	SM	196		
E	Allow for masonry gully trap in chamber complete with golden brown uPVC P-trap with seal drain pipe	NO	2		
F	Allow for 10mm pvc for french drain and backfill	LM	300		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	PERIMETER WALLING -192LM				
	(Substructures)				
A	Excavate for foundation trench 600mm wide commencing at reduced level and not exceeding 1.5m deep	CM	180		
B	extra Excavations for widening column bases size (1.0x1.0)m	CM	23		
C	Ditto exceeding 1.5m but n.e 3.0m	CM	26		
D	Extra over for excavation in all classes of rock at any depth	CM	3		
E	Load, cart away from site surplus excavated materials and disporse at areas designated by local authority	CM	180		
F	Fill in and ram selected imported materials around foundation and columns	CM	80		
G	Provide all the necessary planking and strutting to uphold sides of the trenches.	ITEM	1		
H	Allow for keeping all excavations water free by pumping,bailing or otherwise.	ITEM	1		
I	50mm thick (1:4:8) mass concrete blinding to walling and column bases	SM	130		
	Vibrated reinforced concrete class				
	20/25 1:2:4/25 as described in;				
J	Foundation strip size (200x600)mm	CM	27		
K	Column bases (1000x1000x300)mm	CM	23		
L	Columns (300x300)mm	CM	23		
M	Ground beam(300X200) and ring beam(200x200)mm respectively	CM	34		
	Sawn/Steel form work to				
N	Vertical sides of column	SM	100		
O	Vertical sides of ground beam	SM	140		
	Steel reinforcement bars including tying bending				
	spacer blocks tying wires and fixing high tensile				
	bars to BS 4461				
A	Y 8	KG	1791		
B	Y 10	KG	407		
C	Y 12	KG	1964		
	225mm thick natural stone substructure walling in cement sand mortar (1:3) including and reinforced with 20 SWG hoop iron in every two alternating course.				
D	225mm thick natural stone wall	SM	131		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
E	25mm thick cement/sand (1:4) rendering on plinth area finished smooth to receive bituminous paint-400mm high	SM	80		
F	Allow for and create 100mm diameter weep holes at ground level every3.0m centers on masonry/concrete wall and prevent ingress using wire mesh grouted in cementsand mortar.	No.	60		
2	**Superstructure-Walling**				
G	200mm thick machine-cut or fair faced dressed natural or approved concrete blocks stone walling in cement/sand (1:4) mortar including 20G hoop-iron in every alternate (1:3)courses.Internally plastered and keying.	SM	598		
H	350mm wide pre-cast concrete coping twice weathered and twice throated fixed to wall.	LM	192		
I	(800x550)mm concrete coping weathered and throated on all sides fixed to double columns.	No.	9		
J	(550x450)mm square concrete coping weathered and throated on all sides fixed columns.	No.	58		
3	**Expansion Joint**				
K	40mm thick construction joint in flex cell or equall and appoved expansion joint and (25x25)mm expedite sealer	SM	15		
4	**Razor Wire**				
	Supply and fix Razor Wire at the top of boundary wall				
	conforming to the following specifications.				
M	Coil size-450mm diameter, Blade profile-ripper razor wire,stretch factor-maximum of 10m per coil and secured to wall with galvanised steel plates at 1m centers	LM	204		
	PIT LATRINE				
	Excavation				
A	Oversite excavation to reduce levels commencing from existing ground level;150mm deep	SM	5		
B	Excavate from reduced level strip foundation and not exceeding 1.5m deep.	CM	4		
C	Excavate from reduced level strip foundation and not exceeding 3.0m deep.	CM	3		
D	Excavate from reduced level strip foundation and not exceeding 4.5m deep.	CM	3		
E	Excavate from reduced level strip foundation and not exceeding 6.50m deep.	CM	3		
F	Extra over excavation in rock	CM	2		
G	Remove surplus soil from site to a place approved by local authority	CM	12		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Mass concrete mix (1:4:8) in				
H	50mm thick blinding in strip foundations	SM	5		
	Vibrated reinforced insitu concrete class 20/20; with minimum cube crushing strength of 20N/mm at 28 days; in				
I	150mm thick ground floor slab	SM	5		
J	Strip foundations	CM	1		
	Supply and fix steel bar in structural concrete work including cutting, bending, hoisting, tying wire, spacer blocks and supporting all in position:				
K	10mm bars	KG	77		
	Mesh fabric reinforcement				
L	Mesh reinforcement No. A142 size 200 x 200mm weighing 2.22 kg per square meter; in floor slab; including all necessary supports	SM	5		
	Sawn formwork to:				
M	Edges: slabs 75 - 150mm girth	SM	9		
N	Vertical sides; strip footing; 200mm high	SM	9		
	Total carried to summarry				
	Walls				
A	200mm thick natural stone foundation walls; machine dressed square; bedded and jointed in cement and sand (1:4) mortar; reinforced with 20SWG Hoop Iron in every alternate course	SM	14		
	Anti-termite treatment				
B	Approved anti-termite chemical treatment; applied by approved professional pest control specialist; applied strictly in accordance with the manufacturers' instructions; ten(10) year guarantee	SM	3		
	DPM				
C	Guage 1000 polythene damp proof membrane	SM	5		
	25mm thick cement/sand (1:4) rendering; on concrete or stonework; wood float finished to				
D	Plinths ; externally	SM	5		
	Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint on rendered surfaces to:				
E	Plinths: externally	SM	5		
	Sawn formwork to				
F	Sides and soffits beams	SM	6		
	Supply and fix square twisted steel bars in structural concrete work including cutting, bending, hoisting, tie wire, spacer blocks and supporting all in position				
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
G	8mm bars	KG	24		
H	12mm bars	KG	47		
	Vibrated reinforced insitu concrete class 20/20; with minimum cube crushing strength of 20N/mm at 28 days; in				
T	Ring beams	CM	1		
	External Walls				
	Machine dressed natural stone walling bedded in cement/sand mortar(1:4) with minimum stone crushing strength of 7N/mm2; reinforced with 20SWG Hoop Iron in every alternate course				
U	200mm thick walls	SM	21		
V	Extra over external walling for horizontal key pointing	SM	21		
	Bituminous felt or other equal approved damp proof course; in cement/sand (1:3) mortar				
W	200mm wide	SM	2		
	SUNDRIES				
X	Make holes on 100mm thick concrete slab for 150mm diameter PVC pipe	NO	1		
Y	Provide and fix 100mm thick PVC vent with cap average length 3m	LM	3		
	ROOF				
	The following in 4 No. purlins; steel structural roof; spanning 3.2m; hoisted to a height of approximately 2.4m from ground level				
A	150 x 50 x 2mm Z purlins bedded in masonry wall with cement sand mortar	LM	15		
B	Drill holes in steel members for 12mm bolts in Z purlins	NO	23		
C	12mm bolts	NO	23		
D	Supply and fix 26g mild steel trough roofing sheets type LT5; factory prepainted to approved standard colour; laid with 150mm end lap and 94mm side laps; fixed to metal purlins including hook bolts, washers and nuts at 1000mm centres	SM	12		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
E	Ditto for side cladding-ALL 4 sides,fixed to 100 high steel fascia claddind frame incuding J-bolts ,washers ,nuts and rubber cups ,including underside of cladding 500mm wide,including 14 gauge galvanised gutters and 100mm downpipes 24gauge secured to wall with brackets 900mm c/c.	SM	14		
	OPENINGS				
	Concrete Louvres				
F	150 x150 x 150mm concrete louvre blocks fixed with cement sand mortar (1:3)	SM	2		
	Window Cill				
G	Supply and fix 200mm clay window cills; bedded and jointed in cement/sand (1:3) mortar; pointed in matching coloured cement to windows	LM	6		
	DOORS				
H	Mild steel light door size 965 x 2100 mm complete with all iron mongery as per drawing SK. No. 06249	NO	2		
	Iron mongery				
	Supply and fix "Assa Abloy" or equal approved iron mongery; matching screws; locks to include a set of 3 keys; available from their authorised local dealers to approval				
I	100mm mild steel butt hinges	NO	2		
J	3 lever steel casement rebated door lock with handles	NO	2		
	Prepare surfaces,three coats gloss oil paint to metal surfaces				
K	Doors internally and externally	SM	4		
	FINISHES				
	FLOOR FINISHES				
	Screed; cement/sand (1:3) on concrete				
L	30mm thick to receive floor tiles	SM	5		
	Supply and fix approved ceramic floor tiles on screed; joints pointed in matching cement grout to approval				
M	300 x300 x 10mm thick approved ceramic tiles	SM	5		
	WALLING				
	Backing: 10mm cement/sand (1:4); on masonry or concrete ; wood float finished to				
N	Walls to receive ceramic tiles	SM	23		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Supply and fix coloured glazed ceramic wall tiles; on backing; joints pointed in matching cement grout				
O	300 x 300 x 10mm thick tiles	SM	23		
P	300 x 50 x10mm thick border tile	LM	14		
Q	Supply and fix matching pvc tile strip to tile edges	LM	56		
	Plaster; 13mm cement/lime putty/sand; wood float; on masonry and concrete to				
R	Walls and concrete surfaces; externally	SM	21		
	Prepare surfaces; apply three coats First grade vinyl emulsion paint or other equal approved; on wood float plaster to:				
S	Walls and concrete surfaces	SM	21		
	GUARD HOUSE				
	SUBSTRUCTURES				
	Excavation				
A	Site excavate to reduce levels commencing from existing ground level;150mm deep and not exceeding 1.5m deep;	SM	7		
B	Excavate for strip foundation trench, commencing reduced level ; not exceeding 1.5m deep	CM	6		
C	Remove surplus soil from site to a place approved by local authority	CM	7		
	Mass concrete mix (1:4:8) in				
D	50mm thick blinding under strip foundations	SM	5		
	Vibrated reinforced insitu concrete class 20/20; with minimum cube crushing strength of 20N/mm2 at 28 days; in				
E	150mm thick ground floor slab	CM	1		
F	Strip foundations	CM	1		
	Supply and fix steel bar in structural concrete work including cutting, bending, hoisting, tying wire, spacer blocks and supporting all in position:				
G	8mm bars	KG	17		
H	12mm bars	KG	29		
	Mesh fabric reinforcement				
I	Mesh reinforcement No. A142 size 200 x 200mm weighing 2.22 kg per square meter; in floor slab; including all necessary supports	SM	5		
	Sawn formwork to:				
J	Edges: slabs 75 - 150mm girth	LM	9		
K	Vertical sides; strip footing; 200mm high	SM	5		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	Walls				
L	200mm thick naturall stone foundation walls; machine dressed square; bedded and jointed in cement and sand (1:4) mortar; reinforced with 20SWG Hoop Iron in every alternate course	SM	8		
	Total carried to summarry				
	Hardcore				
M	300mm thick hardcore of approved inert material; well compacted in 150mm thick (maximum) layers	CM	2		
	Blinding				
N	50mm thick approved quality murram blinding to surfaces of hardcore	SM	5		
	Anti-termite treatment				
O	Approved anti-termite chemical treatment; applied by approved professional pest control specialist; applied strictly in accordance with the manufacturers' instructions; ten(10) year guarantee	SM	5		
	DPM				
P	Guage 1000 polythene damp proof membrane	SM	5		
	25mm thick cement/sand (1:4) rendering; on concrete or stonework; wood float finished to				
Q	Plinths ; externally	SM	5		
	Prepare surfaces and apply undercoat and two finishing coats black bitumastic or other equal approved water resistant paint on rendered surfaces to:				
R	Plinths: externally	SM	5		
	R.C SUPERSTRUCTURE				
	Sawn formwork to				
S	Sides and soffits beams	SM	5		
T	Bench slab	SM	1		
	Supply and fix square twisted steel bars in structural concrete work including cutting, bending, hoisting, tie wire, spacer blocks and supporting all in position				
A	8mm bars	KG	18		
B	12mm bars	KG	38		
	Vibrated reinforced insitu concrete class 20/20; with minimum cube crushing strength of 20N/mm2 at 28 days; in				
C	Ring beam	CM	1		
D	Bench slab	CM	1		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	WALLS				
	External Walls				
	Machine dressed natural stone walling bedded in cement/sand mortar(1:4) with minimum stone crushing strength of 7N/mm2; reinforced with 20SWG Hoop Iron in every alternate course				
E	200mm thick walls	SM	21		
F	Extra over external walling for horizontal pointing	SM	21		
	Bituminous felt or other equal approved damp proof course; in cement/sand (1:3) mortar				
G	200mm wide	SM	2		
	ROOF				
	The following in 4 No. purlins; steel structural roof; spanning 3.2m; hoisted to a height of approximately 2.4m from ground level				
H	150 x 50 x 2mm Z purlins bedded in masonry wall with cement sand mortar	LM	15		
I	Drill holes in steel members for 12mm bolts in Z purlins	NO	23		
J	12mm bolts	NO	23		
K	Supply and fix 24g mild steel trough roofing sheets type IT5; factory prepainted to approved standard colour; laid with 150mm end lap and 94mm side laps; fixed to metal purlins including hook bolts, washers and nuts at 1000mm centres	SM	12		
L	Ditto for side cladding-ALL 4 sides,fixed to 100 high steel fascia claddind frame incuding J-bolts ,washers ,nuts and rubber cups ,including underside of cladding 500mm wide,including 14 gauge galvanised gutters and 100mm downpipes 24gauge secured to wall with brackets 900mm c/c.	SM	14		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	OPENINGS				
	Windows				
	Mild steel casement windows ; fixed panes; custom made; sections to drawings and with approved ironmongery; sections divided with 25 x25 x 3mm thick RHS welded onto main frame 40 x 25 x 3mm RHS;				
N	Ditto but 900 x 1200mm high	NO	5		
	Mild steel door size 965 x 2100 mm complete with all iron mongery as per drawing SK. No. 06249				
O	Supply and fix clay window cills; bedded and jointed in cement/sand (1:3) mortar; pointed in matching coloured cement to windows	LM	6		
	DOORS				
P	Mild steel door size 965 x 2100 mm complete with all iron mongery as per drawing SK. No. 06249	NO	1		
	Iron mongery				
	Supply and fix "Assa Abloy" or equal approved iron mongery; matching screws; locks to include a set of 3 keys; available from their authorised local dealers to approval				
	Total carried to summarry				
Q	100mm mild steel butt hinges	NO	3		
R	3 lever steel casement rebated door lock with handles	NO	1		
	Prepare surfaces, three coats gloss oil paint to metal surfaces				
S	Doors internally	SM	2		
T	Doors externally	SM	2		
	FINISHES				
	FLOOR FINISHES				
	Screed; cement/sand (1:3) on concrete				
U	30mm thick to receive floor tiles	SM	5		
	Supply and fix coloured ceramic floor tiles on screed; joints pointed in matching cement grout to approval				
V	300 x300 x 10mm thick tiles	SM	5		
	WALLING				
	Backing: 10mm cement/sand (1:4); on masonry or concrete ; wood float finished to				
	Walls to receive ceramic tiles				
	Backing: 10mm cement/sand (1:4); on masonry or concrete ; wood float finished to				
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
A	Walls to receive ceramic tiles	SM	18		
	Supply and fix coloured glazed ceramic wall tiles; on backing; joints pointed in matching cement grout				
	300 x 300 x 10mm thick tiles	SM	18		
	300 x 50 x10mm thick border tile	LM	9		
B	Supply and fix matching pvc tile strip to tile edges	LM	36		
	Plaster; 13mm cement/lime putty/sand; wood float; on masonry and concrete to				
	Walls and concrete surfaces; externally	SM	6		
C	**Prepare surfaces; apply three coats First grade vinyl emulsion paint or other equal approved; on wood float plaster to:**				
	Walls and concrete surfaces	SM	6		
5	**RETAINING WALL-86LM**				
A	Excavate for foundation trench 1.0 m wide commencing at reduced level and not exceeding 1.5m deep for wall and retaining wall	CM	140		
B	Ditto exceeding 1.5m but n.e 3.0m	CM	53		
C	Extra over for excavation in all classes of rock at any depth	CM	5		
D	Load, cart away from site surplus excavated materials and dispose at areas designated by local authority.	CM	158		
E	Fill in and ram selected excavated materials around foundation and columns.	CM	105		
F	Allow for keeping all excavations water free by pumping, bailing or otherwise.	ITEM	1		
G	50mm thick (1:4:8) mass concrete blinding to retaining wall foundation base.	SM	158		
	Vibrated reinforced concrete class 25(20) as described in;				
H	retaining wall base 1000x250mm	CM	40		
L	retaining wall stub ranging from 1m to 1.5m but to 1m above ground	CM	53		
	Sawn/Steel form work to				
M	Vertical sides of foundation strip-250mm girth	LM	210		
N	Vertical retaining walls	SM	315		
	Steel reinforcement bars including tying bending spacer blocks tying wires and fixing high tensile bars to BS 4461				
O	Y12 in retaining wall base	KG	1360		
A	Y10 in retaining wall stem	KG	2400		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
B	Y8 binders	KG	700		
C	25mm thick cement/sand (1:4) rendering on walls surfaces	SM	125		
D	Allow for and create 100mm diameter weep holes at ground level every 2.0m centers on masonry/concrete wall and prevent ingress using wire mesh grouted in cement	No.	30		
E	Prepare and apply 3 coats of bituminous paint to external surfaces of all retaining walls.	SM	460		
	WATER STORAGE TANK STEEL TOWER				
A	Excavate for column bases (1.5X1.5)m n.e 1.5m	CM	21		
B	Level and compact bottom of the excavated bases	SM	12		
C	50mm thick 1:4:8 blinding to column bases	SM	12		
D	12 mm diameter high yied steel bars to bases and stubs	KG	230		
E	8mm ditto	KG	58		
F	concrete (1:2:4, class 20) in column bases	CM	3		
G	Allow for accurately setting 16 No. 20mm diameter galvanised steel foundation bolts at 250mm centres on foundation column plinths	ITEM	1		
H	V. r. concrete (class 25) in tank foundation stub columns	CM	2		
	plinths size (400mmx400mm)				
I	Sawn formwork to sides of columns	SM	15		
J	Backfill and ram excavated material around foundation	CM	16		
K	Load and cart away the surplus	CM	5		
	The following in steel work tower 2000x2000mm wide x6000m high fixed 1500mm deep in ground including cutting and welding or bolting as necessary finished,with 3 coats of red oxide primer				
A	300x300x10mm thick base plate with 4no. 18mm	NO	5		
	diameter holes spaced at 250mm centres and welded to the bottom of tower column				
B	100x100x8mm mild steel angles in main framework welted to base plates and reinforced with 12No.cleats	LM	28		
C	Ditto decking	LM	23		
D	Ditto (50x50x6mm) in bracing and struts	LM	85		
E	black pipes (40mm) in ballustrades	LM	35		
F	(50x100x6mm) RHS in decking	LM	23		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
G	4mm thick galvanised checkered plate secured on decking	SM	10		
H	40mm GMS pipe handrail verical and horizontal	LM	46		
I	Allow for water storage tank access ladder with 50x50x4mm main frame with 16mm rods spaced at 300mm c/c	ITEM	1		
J	Apply two coats of gloss paint to tower	ITEM	1		
K	Supply and install 3500 litres capacity ROTO-TANK including hoisting to position and including hoisting to position and applying two coats of brilliant white gloss paint on its outer surface	ITEM	1		
L	Allow for connecting piped water to elevated storage tank Using 12mm class B pipes including all the necessary water control fittings	ITEM	1		
	Septic Tank				
M	Excavate, construct and dispose surplus excavated material, septic tank with a capacity of 6000ltrs; including inlet and outlet manholes as per drawing No. (50) 5842	NO	1		
N	Construct soak pits as per drawing No. (50) 5845 but 6m deep	NO	1		
O	Fill up existing septic and soakpits and by rubble or hardcore lower level and compacted muruum in layers 200mm	ITEM	1		
	Total carried to summarry				

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
	SUMMARY PAGE				
	TOTAL FROM PAGE 1				
	TOTAL FROM PAGE 2				
	TOTAL FROM PAGE 3				
	TOTAL FROM PAGE 4				
	TOTAL FROM PAGE 5				
	TOTAL FROM PAGE 6				
	TOTAL FROM PAGE 7				
	TOTAL FROM PAGE 8				
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	TOTAL FROM PAGE 24				
	TOTAL FROM PAGE 25				
	TOTAL FROM PAGE 26				
	TOTAL FROM PAGE 27				
	TOTAL FROM PAGE 28				
	SUBTOTAL				
	ALLOW 16% VAT				
	TOTAL CARRIED TO FORM OF TENDER				
	Amount in words:.....				
	.....				
	.....				
	……..				

		COMPANY STAMP
	Signed:	
	Name:	
	Address:	
	Conctract Period: ……Weeks	

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT