

**CONSTRUCTION OF 2 NO CLASSROOM - 2018/2019**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO. 1</u></b> <b><u>SUBSTRUCTURE (PROVISIONAL)</u></b>				
A	Excavating oversite to remove top vegetable soil average 150mm disposing on site average 50m from excavations	210	SM		
B	Mass excavation to reduce level not exceeding 1.50m deep	52	CM		
C	Excavate trenches in red soil to receive foundations not exceeding 1.50m deep starting from reduced level	106	CM		
D	Ditto for stachion and pier bases	7	CM		
E	Extra over normal excavation for excavating in rock of any class	4	CM		
F	Backfill and compact selected excavated materials in 150mm thick layers	81	CM		
G	Load and cart away surplus excavated material	85	CM		
H	Allow for keeping all excavations free from surface and ground water		ITEM		
J	Allow for planking and strutting to uphold sides of all excavations		ITEM		
K	Approved natural stone hard-core; depositing and compacting in 150mm thick layers, levelling	42	CM		
L	25mm thick stone dust or murrum blinding over hardcore	140	SM		
M	Termidore 25 EC" insecticide treatment to hard-core beds and tops of foundation walls	140	SM		
	<b><u>Concrete</u></b>				
N	Plain concrete (1:4:8) in 50mm thick blinding under strip footings	47	SM		
	<b><u>Vibrated reinforced concrete class 20/20 to:</u></b>				
P	Foundations in trenches	9	CM		
Q	100mm thick horizontal verandah slab	28	SM		
R	150mm thick floor slab	123	SM		
	<b>CARRIED TO COLLECTION</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>Fabric mesh reinforcement 200mm laps</u></b>				
A	Reference A1042 weighing 2.22kg per square metre	151	SM		
	<b><u>Square twisted mild steel reinforcement Bars</u></b>				
B	8mm diameter bars	110	KG		
C	10mm diameter bars	222	KG		
	<b><u>Sawn formwork to:</u></b>				
D	Vertical side of foundations	34	SM		
E	Edges of slab; 75 to 150mm wide	69	LM		
	<b><u>Approved natural stonework, roughly squared in cement mortar (1:4):25mm wide x20 gauge hoop iron strapping every alternate course</u></b>				
F	200mm thick walls in foundations	97	SM		
G	Extra for attached pier 400x200mm	13	LM		
	<b><u>1000 gauge polythene sheeting; 150mm laps</u></b>				
H	Damp proofing membrane; horizontal	151	SM		
	<b><u>Cement and sand (1:4) rendering as described</u></b>				
J	12mm thick, two coatwork to walls steel trowelled	17	SM		
	<b><u>Painting and Decorations</u></b>				
K	Prepare prime and apply three coats of black bituminous paint to rendered surface externally	17	SM		
	<b>CARRIED TO COLLECTION</b>				
	COLLECTION				
	Page 2/A/1 above				
CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO. 2</u></b> <b><u>REINFORCED CONCRETE FRAME</u></b>				
	<b>Reinforced concrete class 20/20mm mix (1:2:4) in:-</b>				
A	Ring Beams	4	CM		
	<b><u>Reinforcement</u></b>				
	<b><u>Square twisted mild steel reinforcement in structural concrete works</u></b>				
B	8mm diameter bars	118	KG		
C	12mm diameter bars	213	KG		
	<b><u>Sawn formwork as described to:</u></b>				
D	Sides and soffites of Ring beams	37	SM		
	<b><u>STEEL COLUMNS</u></b>				
	<b><u>Galvanized mild steel Pipes</u></b>				
E	3000mm long, class B, 75mm diameter circular hollow section (CHS) fish tail logs at bottom at 'LS' shapes bracket 75x50x100mm high at top steel pipes, complete with concrete base,300x300x300mm deep including excavations and soil disposal	5	NO		
CARRIED TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO. 3</u></b>				
	<b><u>EXTERNAL WALLING</u></b>				
	<b><u>Machine cut natural quarry stone-work bedded and jointed in cement and sand (1:4) mortar as described in:-</u></b>				
A	150mm thick walls	117	SM		
B	150mm thick gable walls	16	SM		
	<b><u>Vent Blocks</u></b>				
C	Fix 200x200x25 mm thick pre-cast concrete vents jointed in 1:3 mortar	16	Prs		
	<b><u>Damp Proofing</u></b>				
D	200mm wide hesian based damp proof course: 150mm laps	62	LM		
E	Eaves filling to 200mm walls; 300 mm average height	34	LM		
F	Raking cutting to 200mm thick wall	30	LM		
<b>TOTAL ELEMENT NO. 3 WALL CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO. 4</u></b>				
	<b><u>ROOF CONSTRUCTION, COVERINGS AND RAINWATER DISPOSAL</u></b>				
	<b><u>Construction</u></b>				
	<b><u>Truss joints to be bolted with appropriated No. of shear connectors or as instructed by Structural Engineer and hoisting approximately 3000mm above ground floor level</u></b>				
	<b><u>All carpentry timber to be treated and sawn cypress second grade seasoned to an equilibrium moisture content of between 9% and 15%</u></b>				
A	100x50mm Wall plate bolted to concrete with and including 12mm diameter bolts at 1500mm centres	34	LM		
B	200x50mm Ridge Board	18	LM		
	<b><u>The following in 12 No. nailed timber trusses including hoisting and placing 2700mm above ground floor slab level at 1500mm general spacing</u></b>				
C	150x50mm Rafters	140	LM		
D	Ditto, king post	26	LM		
E	Ditto, Tie beam	108	LM		
F	100x50mm struts and ties	158	LM		
G	75x50mm Purlins	216	LM		
H	225mm x25mm Fascia and barge board	81	LM		
J	150x50mm Bearer top of CHS	18	LM		
	<b><u>ROOF COVERINGS</u></b>				
K	28 Gauge Resincot galvanized IT4 iron roofing sheets nailed on purlins labour and material	210	SM		
L	Ditto Ridge capping	18	LM		
	<b>CARRIED TO TOLLECTION</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>RAINWATER DISPOSAL</u></b>				
A	150x120mm wide 22 gauge Prepainted galvanised mild steel purpose made box gutter	36	LM		
B	Extra over gutter for stopped ends	4	NO		
C	Ditto for rainwater outlets	6	NO		
D	100mmx22 gauge galvanized mild steel purpose made rainwater down pipe	17	LM		
E	Extra over rainwater down pipe for swanek offset, projecting 600mm	6	NO		
F	Ditto for shoes	6	NO		
	<b><u>Painting and decoration</u></b>				
	<b><u>Prepare surfaces and apply one coat of zinc chromate metal primer and two finishing coats of gloss oil paint on:-</u></b>				
G	Surfaces of metal gutter 200-300mm girth	36	LM		
H	Surfaces of large pipes	17	LM		
	<b><u>Knot, prime, stop, prepare surfaces and apply one undercoat and two finishing coats of gloss oil paint on:</u></b>				
J	General timber surfaces 200-300mm girth externally	81	LM		
	CARRIED TO COLLECTION				
	<b><u>COLLECTION</u></b>				
	Page 2/A/5 above				
	<b>TOTAL ELEMENT NO. 4 CARRIED TO SUMMARY</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><b>ELEMENT NO. 5</b></p> <p>MILD STEEL CASEMENT DOORS</p> <p><b><u>Standard door complete with hinges, stays, fasteners permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand (1:4) mortar. Grille and glazing included, steel casement door comprising 40x25x3mm stiles, bottom and top rail &amp; 4 No. intermediate rails all primed with red oxide.</u></b></p> <p>A 2100x900mm door complete with 50x50x3mm fixed angle frame, 2.5mm thick black sheet checkered plate built into panels, top panels left open for glazing "Union" 3 lever steel door lock 3x200mm lockable tower bolts</p> <p><b><u>Iron mongery</u></b></p> <p><b><u>Supply and fix the following ironmongery with screws to match (Ref. is to Union Catalogue or other equal and approved)</u></b></p> <p>B Rubber door stop fixed to concrete floor or masonry walling with and including 38mm raw bolt</p> <p><b><u>Prepare and apply two undercoat and one finishing coat gloss paint in metal work</u></b></p> <p>C General surfaces; steel casement doors</p>	2	NO		
	TOTAL ELEMENT NO. 5 CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT NO. 6</u></b>				
	WINDOWS				
	<b><u>Purpose made steel casement windows in 25mm wide standard casement 'z' sections comprising permanent ventilators with T-bar, gauze and metal hood for full width of window; all ironmongery and one coat red oxide primer by manufacturer.</u></b>				
A	1500x1500mm window	8	NO		
B	1500x900mm window	6	NO		
	<b><u>Cill</u></b>				
C	100x150x15mm clay tile cills, bedding; jointing in cement mortar (1:4); pointing in coloured cement mortar (1:4)	24	LM		
	<b><u>Glass and glazing to metal with glazing compound</u></b>				
D	4mm thick clear sheet glass 0.10 to 0.50 square metres	26	SM		
	<b><u>Painting and Decoration</u></b>				
E	Touching up manufacturer's priming coat, two undercoats and one finishing coat to glazed metal surfaces internally	26	SM		
F	Ditto to glazed metal surfaces externally	26	SM		
<b>TOTAL FOR ELEMENT NO. 6 WINDOWS CARRIED TO SUMMARY</b>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>ELEMENT No. 7</u></b>				
	<b><u>FINISHES</u></b>				
	<b><u>EXTERNAL WALL FINISHES</u></b>				
A	Extra over dressed stone walling labour for forming recessed horizontal joints and flush vertical joints on walls in cement mortar (1:3) externally	134	SM		
	<b><u>INTERNAL WALL FINISHES</u></b>				
	<b><u>Cement and sand (1:2:9) plaster as describes in:-</u></b>				
B	15mm Thick to vertical surfaces	150	SM		
C	Extra over for black board	30	SM		
	<b><u>FLOOR FINISHES</u></b>				
	<b><u>EXTERNAL FLOOR FINISHES</u></b>				
	<b><u>Cement and sand (1:3) screed finished with Red Oxide as described in:-</u></b>				
D	Floors 40mm thick, trowelled hard and smooth	28	SM		
E	20x100mm high skirting	14	LM		
	<b><u>INTERNAL FINISHES</u></b>				
	<b><u>Cement and sand (1:3) screed finished with Red Nil Oxide as described in:-</u></b>				
F	Floors 40mm thick, trowelld hard and smooth	112	SM		
G	20x100mm high skirting	58	LM		
	<b><u>CEILING FINISHES</u></b>				
	<b><u>Sawn cypress, pressure impregnated as described in:-</u></b>				
H	50x50mm brandering	470	LM		
J	75x50mm ditto plugging	76	LM		
	<b><u>Wrot cypress prime grade as described in:-</u></b>				
K	75x25mm cornice with three labours; plugged	76	LM		
L	12mm thick 'celotex' ceiling lining with vee butt joints	140	SM		
M	Extra for access panel size 600x600mm; including 50x50mm framing	2	NO		
	<b><u>Prepare and apply three coats silk vinyl plastic emulsion paint as described on:-</u></b>				
N	Plastered surfaces	150	SM		
	<b>CARRIED TO COLLECTION</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>Paved areas around Building plinth</u></b>				
A	50mm thick in-situ concrete 600mm wide screeded with cement sand 1:4 mix steel trowelled hard and smooth	20	SM		
	<b><u>External Wall finishes</u></b>				
B	12mm render mix (1:4) to gable walls	15	SM		
C	12mm render mix (1:4) to beams externally	16	SM		
D	12mm ditto to eaves	18	SM		
	<b><u>Painting and Decorations</u></b>				
	<b><u>Prepare and apply three coats silk vinyl plastic emulsion paint as described on:-</u></b>				
E	Soft board ceiling	140	SM		
F	Rendered surfaces external	49	SM		
	<b><u>Prepare and apply three coats black board paint to:</u></b>				
G	Plastered surfaces	30	SM		
	<b><u>Prepare surfaces and apply one coat of zinc chromate metal primer and two finishing coats of gloss oil paint on:</u></b>				
H	Surface of large pipes	15	LM		
	<b><u>COLLECTION</u></b>				
	Page 2/A/9				
	PAGE 2/A/10 above				
	TOTAL FOR ELEMENT NO. 7 CARRIED TO SUMMARY				

**Electrification of ECD classes - Typical Twin Classroom**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Supply, install, test and commission the following</b>				
1	Lighting points wired in 3 x 1.5 sq mm sc PVC copper cables drawn in 20mm diameter HG PVC conduits concealed in building fabric including all accessories but without lighting switches and fittings for one way switching	16	NO		
2	5A white included lighting switches as MK or approved equivalent				
	a) One way switching	2	NO		
	b) Two way switching	2	NO		
3	Lighting fittings complete with appropriate rated lamps as follows: -				
	a) 1200mm, 1X36 W, single fluorescent lighting fitting with opal diffuser for surface mounting as Thorn or approved equivalent	14	NO		
	b) 2x8 W fluorescent bulk head fitting as Thorn or approved equivalent	2	NO		
4	Power point wired in 3 x 2.5 sq mm sc PVC copper cables drawn in 25mm diameter HG PVC conduits concealed in building fabric including all accessories	4	NO		
5	13A twin switched socket outlet plate ivory type as MK or approved equivalent	4	NO		
6	Sub mains comprising 3x6.0 sq mm sc PVC copper cables in concealed in 32mm diameter HG PVC conduits from the CLB to the consumer unit	20	M		
7	4-way SPN consumer unit complete with a 100A integral isolator as havells or approved equivalent	1	NO		
8	MCBs as harvell or approved equivalent:-				
	a) 5A	2	NO		
	b) 30A	2	NO		
9	Standard cable loop in box	1	NO		
10	Earthing the cable loop in box	1	NO		
	<b>TOTAL FOR 1 NO. TYPICAL SINGLE ECD CLASSROOM</b>				

ITEM	DESCRIPTION	PAGE		FOR TENDERERS USE ONLY	FOR OFFICIAL USE ONLY
	<b><u>SUMMARY 2NO ECD CLASSROOM</u></b>				
A	SUBSTRUCTURE	2/A/2			
B	REINFORCED CONCRETE FRAME	2/A/2			
C	WALLING	2/A/4			
D	ROOFING	2/A/6			
E	DOORS	2/A/7			
F	WINDOWS	2/A/8			
G	FINISHES	2/A/10			
H	ELECTRICAL INSTALLATION	2/A/11			
	<b>Sub-Total 01</b>				
J	Fabricate and erect project name board in 75mm diameter 3mm thick steel pipes as per attached drawing	1	NO		25,000.00
K	Sum of Kenya shillings Thirty Thousand only for payment of <b>transport costs of Engineers site</b> supervisory staff		SUM		30,000.00
L	Sum of Kenya shillings thirty thousand only for <b>project management</b>		SUM		30,000.00
M	Sum of Kenya shillings One hundred thousand only for supply, delivery, installation and commissioning of 2 no. 3000 litres rainwater plumbing cylindrical UPVC water tank complete with concrete base pipe and 12mm peglar bib tap and splash point( In No. 2)		SUM		100,000.00
	<b>Sub total 02</b>				
M	Add 16% V.A.T				
	<b>GRAND TOTAL CARRIED TO FORM OF TENDER</b>				
<p>Contract Period .....weeks</p> <p>Amount in words .....</p> <p>.....</p> <p>Tenderers Name .....</p> <p>.....</p> <p>Adress .....</p> <p>.....</p> <p>Signature .....Date.....</p> <p>.....</p>					
Page 2/A/12					