CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPE)				
	BILL NO. 1: PRELIMINARIES				
	Safety, Health and Welfare				
A	First Aid Equipment				
	Water for the Works				
B	Drinking Water for the workers				
C	Labelling of building indicating type of building, source of fund, location and year of construction accorfing to Engineer's instruction				
	Progress Photographs				
D	Set of progress photographs taken from different vantage points of the site				
	Project Sign Board				
E	Erection of project sign board with the various inscription according to Engineer's instruction				
	BILL NO. 1: PRELIMINARIES				
	PRELIMINARIES TO GENERAL SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED)				
	BILL NO.2: MAIN WORKS				
	SUBSTRUCTURE (RE-MEASURED)				
	D. GROUNDWORK				
	D20: Excavating and Filling				
	Site Preparation				
	Clear site vegetation; filling voids left by removal of roots with selected material arising from excavation				
A	Bushes, shrub, undergrowth, hedges, trees and tree stumps not exceeding 600mm girth	440	m^2		
B	Cut down trees girth exceeding 600mm but not exceeding 900mm	5	No.		
	Excavating				
	Topsoil for preservation				
C	Average 150mm deep	35	m^2		
	Pits				
D	Maximum depth not exceeding 1.00m; 47Nr	8	m^3		
	Trenches width exceeding 0.30m				
E	Maximum depth not exceeding 1.00m	80	m^3		
	Breaking out existing materials; extra over any types of of excavation irrespective of depth				
F	Rock; (provisional)	15	m^3		
	Excavated materials arising from excavation				
	Filling to excavation				
G	Average thickness not exceeding 0.25m	39	m^3		
	Approved imported laterite or hardcore				
	Filling to make up levels; depositing and compacting in layers of 150mm maximum thickness				
H	Average thickness exceeding 0.25m	80	m^3		
	INSITU CONCRETE/LARGE PRECAST CONCRETE				
	E10: INSITU CONCRETE				
	Plain insitu concrete; 1:4:8; 15N/mm^2, 25mm aggregate vibrated				
	Blinding beds				
J	Thickness not exceeding 50mm thick	5	m^3		
	Plain insitu concrete; 1:3:6; 15N/mm^2, 25mm aggregate vibrated				
	Foundations				
K	Generally	24	m^3		
	Beds				
L	Thickness not exceeding 125mm	34	m^3		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Reinforced insitu concrete 1:2:4; 20N/mm^2, 19mm aggregate; vibrated				
	Isolated foundations				
A	**Generally**	3	m^3		
	Reinforced insitu concrete 1:2:4; 30N/mm^2, 16mm aggregate; vibrated				
	Columns				
B	Generally	7	m^3		
	E20: FORMWORK FOR INSITU CONCRETE				
	Formwork and basic finsih				
	Edges of bed; plain vertical				
C	Height not exceeding 250mm	40	m		
	Columns; Isolated				
D	Regular shape; rectangular	43	m^2		
	E30: REINFROCEMENT FOR INSITU CONCRETE				
	Reinforcement bars, steel grade 250N/mm^2, hot rolled plain round mild steel				
	Straight or Bent				
E	12mm diameter bar in column base	341	kg		
F	12mm ditto in column	242	kg		
G	10mm ditto in stirrups in column	121	kg		
	MASONRY				
	F10: BRICK/BLOCK WALLING				
	Sandcrete blocks, B.S. 6073, 440 x 215mm solid compressive strength 5.2N/mm2; in cement and sand mortar (1:6)				
	Walls				
G	150mm thick; stretcher bond	316	m^2		
	J30: DAMP PROOF MEMBRANES				
	Transparent Polythene sheeting; lapped joints; 250 microns; 0.02mm thick				
	Damp proofing				
H	General surfaces	280	m^2		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	SURFACE FINISHES				
	M20: PLASTERED/RENDERED/ROUGHCAST COATINGS **Mortar, cement and sand (1:4), trowelled smooth**				
	13mm work to walls on brickwork or blockwork				
A	Width exceeding 300mm	63	m^2		
	M60: PAINTING/CLEAR FINISHINGS **One coat sealer, two coats of 'coral' acrylic paint**				
	Cement rendered general surface				
B	Girth exceeding 300mm	63	m^2		
	To Collection				
	Collection				
	Page 2				
	Page 3				
	Page 4				
	SUBSTRUCTURE TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	SUPERSTRUCTURE				
	GROUNDFLOOR				
	INSITU CONCRETE/LARGE PRECAST CONCRETE				
	E30: INSITU CONCRETE				
	Reinforced insitu concrete 1:2:4; 30N/mm^2, 16mm aggregate; vibrated				
	Columns				
A	Generally	6	m^3		
	Reinforced insitu concrete 1:2:4; 30N/mm^2, 16mm aggregate; vibrated				
	Beam				
B	Generally	9	m^3		
	E20: FORMWORK FOR INSITU CONCRETE				
	Formwork and basic finsih				
	Columns				
C	Vertical Sides of Column	106	m^2		
	Beam				
D	Sides and soffit of beam or lintel	152	m^2		
	E30: REINFROCEMENT FOR INSITU CONCRETE				
	Reinforcement bars, grade 250N/mm^2, hot rolled plain round mild steel				
	Straight/Bent				
E	12mm diameter bar in column	470	kg		
	10mm ditto in stirrups in column	312	kg		
	12mm diameter bar in lintel	833	kg		
	10mm ditto in links in lintel	405	kg		
	INSITU CONCRETE TO SUMMARY				
	MASONRY				
	F10: BRICK/BLOCK WALLING				
	Sandcrete blocks, B.S. 6073, 440 x 215mm solid compressive strength 5.2N/mm2; in cement and sand mortar (1:6)				
	Walls				
G	125mm thick; stretcher bond	346	m^2		
H	Ditto, design walls	18	m^2		
J	300mm wide bituminous felt strip on blockwall filled between roofing sheets	134	m		
	MASONRY BRICK/BLOCK WALLING TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	H CLADDING / COVERING **H72 - ALUMINIUM LONGSPAN COVERING** ***0.40mm IDT Aluzinc (Aluminium for coastal areas) longspan roofing sheets as roof covering laid on hardwood with and including all associated accessories***				
A	pitch; 18 degrees	420	m^2		
B	Ditto, preformed ridge and hip caps, 450mm girth	34	m		
C	Ditto, preformed valley gutters, 450mm girth	12	m		
D	Ditto, preformed rainwater gutter, 450mm girth	38	m		
	CLADDING / COVERING TO SUMMARY				
	G. STRUCTURAL / CARCASING METAL / TIMBER **G20: CARPENTRY/TIMBER FRAMING/FIRST FIXING** ***Sawn hardwood (Odum) treated with preservative***				
E	50 x 150mm purlins	329	m		
F	50 x 150mm valley rafters	13	m		
G	50 x 150mm ridge board	28	m		
H	50 x 75mm end purlins	50	m		
J	50 x 50mm ceiling noggins	994	m		
K	50 x 50mm ceiling hangers	213	m		
L	25 x 300mm fascia board, on edge splayed	81	m		
	The following in 2Nr hardwood trusses				
M	50 x 150mm top chord	20	m		
N	50 x 150mm bottom chord	17	m		
P	50 x 100mm struts	31	m		
	G20: CARPENTRY/TIMBER FRAMING/FIRST FIXING TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	WINDOWS/DOORS/STAIRS **L20: TIMBER DOORS/SHUTTERS/HATCHES** **Panelled Doors**				
	Polished Panelled doors in four panels; 144mm wide stiles and top rail;194mm wide intermediate rail; 244mm wide bottom rail; each panel open and rebated for wood				
A	800 x 2050 x 45mm thick, overall size 900 x 2100mm Double Door	3	No.		
	Ledged Braced Battened Doors				
	20mm x 100mm vertical tongued and grooved boarding nailed to 20mm x 150mm top and bottom ledges and hanging stiles, 20mm x 150mm middle ledges and braces with mortice and tenon joints at corners				
B	900 x 2050 x 45mm thick, overall size 1000 x 2100mm	6	No.		
	40mm thick skeleton framed flush door faced both sides with exterior quality plywood and hardwood lipping to edges all round				
D	Door size 650 x 2050mm x 45mm overall size 750 x 2100mm	8	No.		
	Hardwood treated with preservative; wrought *Door/Window frames*				
E	50 x 150mm door/window frame plugged to blockwall or concrete, odum or equally approved	322	m		
F	12 x 50mm door and window battens	164	m		
G	20 x 20mm window and door glazing beads	185	m		
H	20 x 20mm louvre stops	98	m		
J	12 x 50mm door stop	72	m		
	'Naco' louvre carriers screwed to hardwood with clips to receive louvre blades size:				
K	1125mm long for 8Nr blades	36	prs		
L	849mm long for 6Nr blades	8	prs		
M	575mm for 4Nr blades	8	prs		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	L40 General Glazing ***6mm thick x 150mm wide thick glass louvre blades with rounded*** ***edges fixed into clips of louvre carriers***				
A	900mm long	312	No.		
	6mm thick plain glass sheet as fanlight size:				
B	900 x 200mm	5	No.		
C	800 x 200mm	45	No.		
D	750 x 200mm	2	No.		
	Metal Gate				
E	1000mm wide x 2400mm high metal gate framed with 50mm size square pipes, 3mm thick steel plate at the base to height of 850mm. 20mm size square pipes welded together to form vertical and horizontal members as per architect's specification	1	No.		
	To Collection				
	Collection Page 6 Page 7				
	WINDOWS/DOORS/STAIRS TO SUMMARY				
	PLUMBING INSTALLATION *Waste Pipe* *UPVC pipework and fittings to BS4514:1969*				
F	40mm diameter pipe	14	m		
G	Extra for 40mm bend	7	No.		
H	Extra for 40mm tee	1	No.		
J	Extra for 40mm bottle trap	8	No.		
K	Extra for 38mm floor trap	4	No.		
	Soil and Vent Pipework *UPVC pipework and fittings to BS4514:1969*				
L	100mm diameter waste/vent pipe supported with clips at 1200mm centres	32	m		
M	Extra for 100mm bend	9	No.		
N	Extra for 100mm tee	1	No.		
P	100 copper wire baloon grating fixed on top of vent pipe	3	No.		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Cold Water Installation				
A	19mm diameter pipe	21	m		
B	19mm diameter bend	4	No.		
C	19mm diameter tee	4	No.		
D	19mm - 12mm reducer	4	No.		
E	12mm diameter pipe	12	m		
F	12mm diameter bend	12	No.		
G	12mm diameter tee	4	No.		
H	12mm screw down stop cock	11	No.		
J	Twyford or approved equivalent, white vitreous china WC suite miniature size **(for kids)** comprising the following: i) WC pot with S trap. ii) Cistern, with double push button flush plates for small & large volume control of 6litre and 3litre capacities iii) Valve fitting with plastic syphon and support iv) Inlet & outlet connections. v) Plastic seat and cover. vi)Pedestal stand	4	No.		
K	Ditto - for adults ditto -	6	No.		
L	Twyford semi-oval vitreous china white wash hand basin with the following: i) Plastic bottle trap ii) 12mm chromium plated taps. iii) 32mm chain waste with overflow slot iv) Size approx. 560 x 400mm semi oval, fixed to wall with concealed brackets. vi)Pedestal stand	4	No.		
M	Double bowl Single drainer stainless steel kitchen sink complete	2	No.		
N	600 x 450mm plain glass mirror screwed to wall	4	No.		
P	900mm long chromium plated towel rail	2	No.		
Q	150mm long chromium plated toilet roll holder	10	No.		
R	Overhead shower fitting complete	2	No.		
	To Collection				
	Collection				
	Page 8				
	Page 9				
	Plumbing Installation to Summary				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	ELECTRICAL INSTALLATION				
	Supply, install, test and commission the following electrical works:				
	LV Distribution				
	PVC heavy guage conduit pipe				
	Lay PVC conduit pipes in chases in blockwork, or in floor screed or concrete floor or through ceiling.				
A	50mm diameter	30	m		
	Cables				
B	Lay 2x16mm2 PVC cable in conduit	20	m		
	Copper Earthing components				
C	16mm2 green/yellow copper earthwire drawn in to conduit	30	m		
D	20mm diameter 1.5m long earthrod with clamp driven in to **Furse** or equal	5	No.		
E	1m long air terminal complete; **Furse** or equal	2	No.		
F	3mmx25mm copper tape, clips and clamps	15	m		
	LV Switchgear and Distribution Boards				
G	100A Double pole and neutral moulded case circuit breaker (MCCB) complete with earthbar and enclosure; **Crabtree** or equal.	1	No.		
H	12-way 100A 230V, SPN flush mounted **memshield** distribution board incorporating: 100A SPN Isolator incomer 6Nos. 6A SP MCB outgoing 2Nos. 20A SP MCB outgoing 4Nos. 32A SP MCB outgoing	1	No.		
	General lighting and fans				
	PVC heavy guage conduit and fittings				
J	20mm diameter straight conduit in chases in block work or in floor screed or in concrete floor or in ceiling	500	m		
K	Circular boxes	38	No.		
L	75mmx75mmx35mm rectangular flush steel boxes	20	No.		
	PVC Insulated cable, single core stranded copper conductors 1.5mm2 cable drawn in to conduit				
M	Red insulation	400	m		
N	Black insulation	400	m		
P	Green/yellow insulation	400	m		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Fittings Supply and install the following lighting fittings complete with bulbs and tubes including all connections				
A	8W, 230V Energy saving light complete (internal)	7	No.		
B	18W, 230V Energy saving light complete (internal)	12	No.		
	20W, 230V Energy saving light complete (external)	6	No.		
C	230V, 1420mm (56in) sweep ceiling fan with regulator **complete Relite or Revo** or equal	6	No.		
	Accessories				
D	5A single pole flush plate switches 1-gang 1-way; **MEM** or equal	12	No.		
	General power Final Circuits 230V, 13A Switch Socket Outlet for General Power				
E	20mm diameter PVC rigid conduit laid in chases in block work or in floor screed or in concrete floor	300	m		
F	2.5mm2 PVC red and black insulated single core copper cable drawn in to conduit	600	m		
G	133mmx75mmx35mm flush steel conduit boxes	21	No.		
H	2.5mm2 green/yellow copper cable drawn into conduit	300	m		
J	13A, 230V twin (2-gang) switch socket outlet **MEM** or equal	7	No.		
	Final Circuits 230V 20A Double Pole switch for airconditioner				
K	20mm diameter PVC rigid conduit laid in chases in block work or in floor screed or in concrete floor, beam or column or in ceiling	20	m		
	PVC insulated cable single core stranded copper conductors 4.0mm2 cable drawn into conduit				
L	Red insulation	20	m		
M	Black insulation	20	m		
N	Yellow/Green insulation	20	m		
P	75mmx75mmx35mm flush steel conduit boxes	1	No		
Q	20A, 230V DP switch marked airconditioner/hand dryer/Water heater	2	No		
R	Allow for ECG meter istallation and connection to electricity mains	1	Sum		
	To Collection				
	Collection				
	Page 10				
	Page 11				
	Electrical Installation to Summary				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	FITTINGS AND FIXTURES				
	Severy Counter				
A	Concrete grade 20 in 75mm thick counter slab	2	m^2		
B	12mm diameter mild steel round bar reinforcement in servery counter	41	kg		
C	Sawn formwork to soffit of servery	2	m^2		
D	Ditto to edge of servery 75mm wide	3	m		
E	100mm thick solid sandcrete blockwork in wall	2	m^2		
F	75 x 12mm wrought hardwood plinth	5	m		
G	50 x 50mm wrought hardwood runner	10	m		
H	75 x 50mm ditto	10	m		
J	19mm thick exterior quality plywood in vertical divider	3	m^2		
K	Ditto horizontal divider	2	m^2		
L	19mm thick plywood door size 275 x 725mm with hardwood lipping to edges all round	4	No.		
M	Ditto size 670 x 825mm ditto	3	No.		
N	Supply and fix ball and catcher	4	No.		
P	Ditto pair 75mm brass butt hinges	7	No.		
Q	Ditto cupboard pull handle	7	No.		
R	13mm thick cement and sand render (1:4) on wall	10	m^2		
S	13mm thick cement : sand (1:3) screeded backing on wall	6	m^2		
T	13mm thick cement:sand (1:3) screeded bed	2	m^2		
U	13mm thick screeded backing (1:3) 75mm wide	3	m		
V	6mm thick glazed ceramic tiles to side of servery counter	6	m^2		
W	6mm thick porcelain tiles on top of servery counter	2	m^2		
X	Ditto to edge of servery counter 75mm wide	4	m		
Y	Knot, prime stop and apply two coats of oil paint on general surfaces of wood	10	m^2		
Z	Ditto on plinth not exceeding 100mm girth	5	m		
AA	Knot, prime and stop and apply two coats of wax polish on wood	4	m^2		
	Kitchen and Office Store shelving				
AB	19mm thick exterior quality plywood	11	m^2		
AC	50 x50mm wrought hardwood plinth and stiffener	19	m		
AD	75 x 20mm hardwood plinth	7	m		
AE	50 x 50mm angular hardwood wedge fixed to wall with concrete nails	75	m		
AF	Knot, prime stop and apply two coats of oil paint on general surfaces of wood	73	m^2		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Cleaner's Cabinet				
A	25mm thick exterior quality plywood for sides, top, back and dividers	5	m^2		
B	25mm thick plywood door size 450 x 1800mm with hardwood lipping to edges all round	2	No.		
C	Supply and fix pair 75mm brass butt hinges	2	No.		
D	Ditto cupboard pull handle	2	No.		
E	Ditto drawer lock	1	No.		
F	Ditto 75mm barrel bolts	2	No.		
G	Knot, prime stop and apply two coats of oil paint on general surfaces of wood	9	m^2		
	White Boards				
H	4800 x 1200mm size (2No. 2400 x 1200mm) seamlessly joined together 20mm thick medium density white fibre board(MDF) with 20 x 20mm aluminium lipping and fixed with proprietary screws to 50 x50 x75mm hardwood wall plug fixed into block wall as writinng board	2	No		
L	Non-Permanent White Board Markers (a box of 12 of various colurs)	2	No.		
M	Duster 150 x 50 x 50mm Foam surface lining glued to hardwood	2	No.		
N	5 x 125 x 400mm aluminium duster and marker holder with 15mm high upstand	2	No.		
	Painting and Decorating				
P	Prepare and apply one undercoat and two coats of emulsion paint on soffit and supports of worktop	4	m^2		
	To Collection				
	Collection				
	Page 12				
	Page 13				
	FITTINGS AND FIXTURES TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE GH¢	AMOUNT GH¢
	SURFACE FINISHES				
	M10: CEMENT SAND/CONCRETE/GRANOLITHIC/ SCREEDS/FLOORING				
	Floor Finishings				
	Screed; Cement and Sand (1:3)				
	50mm thick work to floors on concrete base; screeded				
A	Level and to falls only but not exceeding 15 degrees from the horizontal cast in bays of 1200 x 1200mm	204	m^2		
B	*12mm thick work to skirtings on walls height 100mm*	38	m		
C	Ditto ceramic floor tiles (ms)	60	m		
D	25mm thick floated paving on ramp	4	m		
E	25mm thick for porcelain floor tiles	36	m		
	Polished in-situ terrazzo paving in grey cement and small local chippings of colour and size to be selected by the Architect on concrete floor bed				
F	20mm Level paving cast in bays not exceed-ing 1.00 square metres between and including 3x25mm black ebonite dividing strips set vertically in screed	320	m^2		
G	Ditto cut but unpolished terrazzo for verandas, ramps, aprons etc.	40	m^2		
	M40: STONE/CONCRETE/QUARRY/CERAMIC TILING/ MOSAIC				
	Porcelain floor tiles, unpolished finish; symmetrical layout; bedding in kerabond adhesive cement; pointing with grout				
	600 x 600 x 10mm units to floors on sand and cement base; level or to falls only not exceeding 15 degrees from horizontal				
H	plain, internally and externally	36	m^2		
J	600 x 600 x 10mm units to skirtings on sand and cement base; height 100mm	38	m		
	Ceramic tiles, B.S. 6431, glazed; 2 joints symmetrical layout; bedding in cement and sand (1:3) mortar; grouting with coloured cement grout to match				
K	400 x 250 x 6mm units to walls on sand and cement base; plain, width exceeding 300mm	85	m^2		
	M10: CEMENT SAND/CONCRETE/GRANOLITHIC/ SCREEDS/FLOORING				
	Wall Finishings				
K	Mortar, cement and sand (1:3) 12mm thick work to walls on concrete or blockwork base; backing width exceeding 300mm	840	m^2		
	M20:PLASTERED/RENDERED/ROUGHCAST COATINGS				
	Mortar, cement and sand (1:4); steel trowelled				
K	*12mm thick work to walls on concrete or blockwork base;* width exceeding 300mm	13	m^2		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	M60: PAINTING AND CLEAR FINISHING				
	One coat preparatory primer and two coats of 'coral' acrylic emulsion paint internally and externally on				
	Cement and Sand rendered walls				
A	girth exceeding 300mm	840	m^2		
	Cement and Sand rendered columns beams				
B	**girth exceeding 300mm**	8	m^2		
C	Screen wall	17	m^2		
	Soffit of Plywood Ceiling				
D	girth exceeding 300mm	420	m^2		
	One coat preparatory primer and two coats of oil paint on general hardwood surfaces				
E	Girth exceeding 300mm	38	m^2		
	One coat preparatory primer and two coats of oil paint on isolated hardwood surfaces frames				
F	Girth not exceeding 300mm	79	m		
G	Fascia or badge board	27	m^2		
	One coat preparatory primer and two coats of 'coral' oil paint internally externally on				
	Cement and Sand rendered walls				
H	girth exceeding 300mm	163	m^2		
J	*Sides of columns 900mm high*	3	m^2		
K	*Metal gate measured flat*	2	m^2		
	Wood Primer				
L	*Prime back only of joinery before fixing* girth not exceeding 300mm	26	m		
	To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	LININGS/SHEATING/DRY PARTITIONING				
	K11: RIGID SHEET FLOORING/SHEATHING/LININGS/				
	CASINGS				
	CEILING FINISHES				
	Wrought treated hardwood				
A	12 x 38mm cover battens	994	m^2		
	Plain sheet finishing				
B	1200mm x 1200mm x 6mm thick exterior quality plywood fixed to 600 x 600mm hardwood soffits (measured elsewhere)	420	m^2		
C	PVC T & G panelit (iinterplast) to external ceiling	70	m^2		
	Ceiling hatch access				
D	Plywood ceiling with netted openings nailed to noggins 600 x 600mm	6	No.		
E	Ditto - at eaves 600 x 600mm	4	No.		
	To Collection				
	Collection				
	Page 14				
	Page 15				
	Page 16				
	SURFACE FINISHES TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	BUILDING FABRIC SUNDRIES				
	P21: IRONMONGERY				
	Ironmongery				
	To hardwood and the like				
A	Pair, stainless steel double ball bearing butt hinges size 100 x 75 x 3mm or any other approved make	2	No.		
B	Ditto, 225mm Tee Hinge	9	No.		
C	Mortice lock with set lever handle furniture	16	No.		
D	Approved hasp and staple	4	No.		
E	Approved heavy duty padlock	4	No.		
F	Approved door stay	4	No.		
	Welded Mesh				
G	50 x 50mm welded mesh nailed to hardwood with cover battens (ms	40	m^2		
	Insect Screen				
H	Fibre insect proof netting nailed to hardwood with cover battens (m/s	40	m^2		
	Burglar proofing				
J	Supply and install 12.5mm galvanized rectangular metal pipe as burglar-proof to Architect's specification and design as described				
	Windows				
K	900 x 900mm (W3)	2	No.		
L	1750 x 1200mm (W1a)	1	No.		
M	1750 x 1500mm (W1)	3	No.		
N	*Doors*				
P	900 x 2400 (D1)	2	No.		
	Balustrade				
Q	50 x 1.5mm thick galvanised pipe as top and bottom rail, 25 x 1.5mm thick galvanised middle rails cut to size and welded	18	m		
	BUILDING FABRIC SUNDRIES TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	MAIN WORKS SUMMARY				
	SUBSTRUCTURE				
	SUPERSTRUCTURE				
	INSITU CONCRETE				
	MASONRY				
	CLADDING/COVERING				
	CARPENTRY				
	WINDOWS/DOORS/STAIRS				
	PLUMBING INSTALLATION				
	ELECTRICAL INSTALLATION				
	FITTINGS AND FIXTURES				
	SURFACE FINISHES				
	BUILDING FABRICS AND SUNDRIES				
	TOTAL MAIN WORKS TO GENERAL SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED)				
	BILL NO.3 : EXTERNAL WORKS AND DRAINAGE				
	Aprons				
A	Excavate trench for kerb or dwarf wall not exceeding 1.50m deep commencing at ground level	6	m^3		
B	Remove excavated material from site	3	m^3		
C	Backfill around foundations with selected excavated material	3	m^3		
D	Laterite filling to make up levels under aprons	7	m^3		
E	Concrete grade 15 in kerb footing or dwarf wall foundation	3	m^3		
F	Ditto in 75mm thick apron	34	m^2		
G	Sawn formwork to edge of apron 75mm high	56	m		
H	100mm thick solid sandcrete blockwork laid and jointed in cement mortar (1:3) to side of gravel bed	28	m^2		
J	25mm cement and sand (1:3) screed to aprons, screeded to fall	34	m^2		
K	13mm thick cement and sand render (1:4) to sides of dwarf wall	38	m2		
L	Prepare and apply two coats of emulsion paint on rendered surfaces	38	m^2		
	Apron to Collection				
	Kerbed gravel beds				
M	Excavate trench for kerb or dwarf wall not exceeding 1.50m deep	4	m^3		
N	Remove excavated material from site	3	m^3		
P	Backfill around foundations with selected excavated material	1	m^3		
Q	Concrete grade 15 in kerb footing or dwarf wall foundation	2	m^3		
R	100mm thick solid sandcrete blockwork laid and jointed in cement mortar (1:3) to side of gravel bed	26	m^2		
S	150mm thick gravel filling in bed.	31	m^2		
T	13mm thick cement and sand render (1:4) to sides of dwarf wall	36	m^2		
U	Prepare and apply two coats of emulsion paint on rendered surfaces	31	m^2		
	Kerbed gravel beds to Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Soil and waste pipework				
A	Excavate trench for soil and waste pipes not exceeding 1.50m deep (average 1.0m deep) , part return, fill in and well				
B	ram and remove surplus excavated material from site.	23	m		
C	75mm diameter UPVC waste pipe laid and jointed in trench	20	m		
D	100mm diameter UPVC soil pipe laid and jointed in trench	23	m		
	Soil and waste pipework to Collection				
	The following in 5 No. Inspection Chambers				
E	Excavate pit for inspection chamber not exceeding 1.50m deep commencing at ground level	4	m^3		
F	Backfill selected excavated material around foundations	3	m^3		
G	Remove surplus excavated material from site	1	m^3		
H	Plain insitu concrete grade 15 in 100mm bed	2	m^2		
J	Sawn formwork to edge of bed 100mm high	14	m		
K	600x600x50mm precast concrete grade 20 manhole cover reinforced with approximately 5kg of mild steel (m.s.) round bar reinforcement and finished fair on all exposed surfaces including 10mm diameter m.s. lifting handles.	2	Nr		
L	750 X 750 X 50mm ditto with approximately 7 kg. of mild steel ditto	3	Nr		
M	100mm solid sandcrete blockwork wall jointed in cement:sand (1:4) mortar	1	m^2		
N	125mm ditto ditto	6	m^2		
P	150mm thick (average) benching in bottom of manhole internal size 200x500mm with rounded and dished edges as required with 12mm thick cement and sand render trowelled smooth	6	Nr		
Q	Ditto size 350 x 350mm ditto	2	Nr		
R	Extra over benching for forming 100mm channel 500mm long	6	Nr		
S	Ditto channel Y-shaped on plan 900mm long	2	Nr		
T	13mm thick cment:sand render to sides of inspection chamber	3	m^2		
	Inspection Chambers to Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Septic tank				
A	Excavate pit for septic tank not exceeding 1.50m deep commencing at ground level	27	m^3		
B	Ditto over 1.50m but not exceeding 3.00m deep ditto	13	m^3		
C	Extra over for excavation in rock	1	m^3		
D	Backfill selected excavated material around foundations	26	m^3		
E	Remove surplus excavated material from site	15	m^3		
F	Plain insitu concrete grade 20 in 150mm bed	1	m^2		
G	Plain insitu concrete grade 20 in 225mm bed	8	m^2		
H	Reinforced insitu concrete grade 20 in column	1	m^3		
J	Ditto in 150mm horizontal suspended slab	6	m^2		
K	12mm diameter mild steel round bar reinforcement in column	140	kg		
L	10mm ditto ditto	121	kg		
M	12mm diameter mild steel round bar reinforcement in slab	150	kg		
N	10mm ditto	121	kg		
P	Sawn formwork to soffit of suspended slab	10	m^2		
Q	Ditto to sides of column	2	m^2		
R	Sawn formwork to edge of slab 150mm high	14	m		
S	Ditto 225mm high	12	m		
T	50x75mm hardwood planted on formwork as rebate	7	m		
U	50mm thick (average) benching in bottom of septic tank	4	m^2		
V	600 x 600 x 75mm precast concrete grade 20 manhole cover reinforced with approximately 5kg of mild steel (m.s.) round bar reinforcement and finished fair on all exposed surfaces including 10mm diameter (m.s.) lifting handles.	3	Nr		
W	150mm solid sandcrete blockwork wall jointed in cement mortar(1:4)	26	m^2		
X	13mm thick cement and sand render (1:4) on wall	25	m^2		
Y	Ditto on concrete soffits	4	m^2		
Z	25mm thick cement and sand(1:4) screeded bed on slab	6	m^2		
AZ	100mm PVC tee built into blockwork	2	Nr		
	Septic tank to Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Soakaway pit				
A	Excavate pit for soakaway not exceeding 1.50m deep commencing at ground level	14	m^3		
B	Ditto over 1.50m but not exceeding 3.00m deep ditto	5	m^3		
C	Remove surplus excavated material from site	5	m^3		
D	Backfill selected excavated material around foundations	14	m^3		
E	Plain insitu concrete grade 15 in 100mm thick foundation	3	m^2		
F	Sawn formwork to edge of slab 100mm high	9	m		
G	150mm solid sandcrete blockwork wall jointed in cement mortar(1:4)	13	m^2		
H	Graded stone filling in soakaway pit	2	m^3		
J	1.50m x0.50m x125mm precast concrete grade 20 cover reinforced with approximately 40kg of mild steel (m.s.) round bar reinforcement and finished fair on all exposed surfaces including 10mm diameter (m.s.) lifting handles.	3	Nr		
	Soakaway Pit to Collection				
	Fencewall				
K	Excavate foundation trench not exceeding 1.50m deep commencing at stripped level	11	m^3		
L	Excavate pit for column base not exceeding 1.50m deep commencing at stripped level	3	m^3		
M	Backfill selected excavated material around foundation	10	m^3		
N	Remove surplus excavated material from site	4	m^2		
P	Concrete grade 15 in foundation	3	m^3		
Q	Concrete grade 15 in 50 mm blinding	3	m^2		
R	Concrete grade 20 in column or column base	2	m^3		
S	12mm diameter mild steel round bar reinforcement in column base or column	87	kg		
T	10mm ditto in stirrups in column	14	kg		
U	Sawn formwork to sides of column base	8	m^2		
V	Sawn formwork to sides of column	9	m^2		
	Fencewall	**c/f**			

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
		b/d			
	Fencewall cont'd				
A	Precast concrete grade 20 in 250 x 75mm thick once weathered, twice throated coping cast in convenient lengths and bedded in cement mortar (1:4)	25	m		
B	Ditto in 210 x 50mm thick twice weathered , twice throated coping ditto	15	m		
C	Ditto size 250 x 250 x 75 mm thick four times weathered and throated ditto	16	Nr		
D	125mm thick solid sandcrete blockwork in cement mortar (1:6) in wall	21	m^2		
E	100mm thick approved precast sandcrete design blockwork in cement mortar (1:6) in wall	26	m^2		
F	**Metal gate comprising 50mm vertical hollow square pipes 1.475m high welded at 100mm centres to 4 No. 50 x 75mm horizontal top, middle and bottom rails and 3mm thick steel plate 1500 x 850mm all complete with 2 No. hangers for casting into concrete and hasp and staple overall size**				
G	3000mm x 1900mm high	1	Nr		
H	1000mm x 1900mm high	1	Nr		
J	13mm thick cement and sand render (1:6) on wall	42	m^2		
K	Ditto on column	7	m^2		
L	Ditto on coping	8	m^2		
M	Tyrolean finish to design blockwork wall	52	m^2		
N	Prepare and apply two coats of acrylic emulsion paint on rendered wall or column	34	m^2		
P	Ditto on concrete coping	8	m^2		
Q	Prepare and apply two coats of oil gloss paint on general surfaces of metalwork	14	m^2		
	Fencewall To Collection				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Concrete paved area/kerbs				
A	Excavate foundation for kerb not exceeding 1.50m deep commencing at ground level	2	m^3		
B	Concrete grade 15 in foundation to kerb	2	m^3		
C	Ditto in ramp	0.5	m^3		
D	Load and cart away surplus excavated material from site	1	m^3		
E	175mm thick Sand filling in play area	43	m^2		
F	50mm bed of granite stone dust under paving blocks	20	m^2		
G	Precast concrete grade 20 in 1000 x 450 x 100mm thick half battered kerb laid and jointed in cement mortar (1:3)	16	m		
H	75 mm thick precast concrete paving blocks as manufactured by ACP Ltd or other equal on bed of stone dust (m/s)	20	m^2		
J	Polythene sheet laid on compacted earth	20	m^2		
	<u>Concrete paved area/kerbs To Collection</u>				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	ELEVATED WATER TANK SUPPORT AND MECHANIZED BOREHOLE				
	Water Tank Supports				
	Substructure				
A	Clear site of all weeds, undergrowth, bushes and shrubs; cut down small trees not exceeding 100mm girth; grub up roots rake to heaps and burn on site	12	m^2		
B	Excavate foundation trench not exceeding 1.50m deep commencing at stripped level	1	m^3		
C	Excavate pit for column base not exceeding 1.50m deep commencing at stripped level	7	m^3		
D	Remove surplus excavated material from site	2	m^3		
E	Backfill around excavations with selected excavated material	6	m^3		
F	Approved laterite filling deposited and compacted in layers not exceeding 150mm thick in making up levels under floors beds	2	m^3		
	Plain in situ concrete (Grade 15) as described in				
G	50mm thick blinding	9	m^2		
H	Foundation	1	m^3		
J	Benching fillet at base of tank	1	m		
	Reinforced in situ vibrated concrete (Grade 20) as described in				
K	Column base	1	m^3		
L	Column	1	m^3		
M	125mm thick floor slab	4	m^2		
	Reinforcement				
	Rolled mild steel round bar reinforcement to BS 449 as described in:				
N	12mm diameter bar in column base	47	Kg		
P	16mm ditto in column	51	Kg		
Q	10mm ditto in stirrups in column	29	Kg		
R	125mm thick floor bed	4	m^2		
	C/FWD				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	B/FWD				
	Sawn Formwork				
A	Sides of Column Base	5	m^2		
B	Sides of Column	3	m^2		
C	Edge of floor bed 150mm high	8	m		
	Blockwork				
	Solid sandcrete blockwork in cement mortar (1:4)				
D	150mm thick wall in foundation	8	m^2		
	Finishings				
	13mm thick cement and sand render (1:6)				
E	Sides of external wall	16	m^2		
	Superstructure				
	Reinforced in situ vibrated concrete (Grade 20) as described in				
F	Column	1	m^3		
G	125mm thick floor slab	4	m^2		
	Reinforcement				
	Rolled mild steel round bar reinforcement to BS 4449 as described in:				
H	12mm diameter bar in Slab	99	Kg		
J	16mm ditto in column	58	Kg		
K	10mm ditto in stirrups in column	34	Kg		
	Sawn Formwork				
L	Soffit of slab	4	m^2		
M	Sides of Column	8	m^2		
N	Edge of floor bed 150mm high	8	m		
	Plasterwork and other finishing				
P	Rendering to column	8	m^2		
Q	Rendering to soffit of slab	12	m^2		
	C/FWD				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	B/FWD				
	Beds and backings **Cement and sand (1:3)**				
A	50mm thick float paving on slab	4	m^2		
	Painting and Decorating				
	Prepare, seal and apply one undercoat and two finishing coats of oil gloss paint on rendered surfaces				
B	Columns	8	m^2		
	Water Tank and Associated Pipeworks				
C	Supply and install 5000 Litres "Polytank" water container with all accessories	2	No.		
D	Allow for all pipeworks in connection with the above		Item		
E	Allow for the installation of galvanized steel railing and steps		Item		
	Elevated Water Tank, pipeworks and Supports **Carried to Bill Summary**				
	MECHANISED BORE HOLE				
F	Drilling, Mechanisation, Installation and Mechanising of borehole, including the supply and installation of necessary pipe connection to storage system	1	No		
G	Supply and install 1.5HP Submersible water pump including automatic control system,filters,pipeworks and electrical works	1	No		
H	Extention of power to the facility including ECG meter	1	No		
	Supply and install solar powered 1HP water pump including automatic control system, filters, pipeworks and electrical works	1	No	N/A	
	MECHANISED BORE HOLE CARRIED TO SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	Collection				
A	Apron				
B	Kerbed Gravel Bed				
C	Soil & Waste Pipework				
D	Inspection Chambers				
E	Septic Tank				
F	Soakaway Pit				
G	Fence Wall				
H	Concrete Paved Area & Kerbs				
J	Elevated Water Tank, pipeworks and Supports				
K	Mechanised Borehole				
	EXTERNAL WORKS TO GENERAL SUMMARY				

CONSTRUCTION OF 2-UNIT KINDERGARTEN BLOCK WITH ANCILLARY FACILITIES (L-SHAPED) AT BUADUM BASIC SCHOOL					
ITEM	**DESCRIPTION**	**QTY**	**UNIT**	**RATE GH¢**	**AMOUNT GH¢**
	GENERAL SUMMARY BILL NO.1: PRELIMINARIES BILL NO.2 :MAIN WORKS BILL NO.3 :EXTERNAL WORKS				
	SUB-TOTAL				
	ADD CONTINGENCY	2.5%			
	TOTAL COST OF THE WORKS				