Item	Description	*QTY*	UNIT	RATE	AMOUNT
	CONSTRUCTION OF 3 SEATER W/C TOILET AT JUAPONG RC SCHOOL				
	Bill No. 1:				
	PRELIMINARIES				
	CONTRACTUAL REQUIREMENTS				
1.0.1	*All risk insurance for the works*				
	SPECIFIC REQUIREMENTS				
	General Scaffolding				
1.0.2	*Allow for general scaffolding for the whole of the work*				
	Safety, Health and Welfare				
1.0.3	*Allow for safety, health and welfare of workmen (First Aid)*				
	Transport				
1.0.4	*Allow for transportion for workmen*				
	Water for the Works				
1.0.5	*Include for providing the whole of the water required for execution of the works*				
	Watching and Protecting				
1.0.6	*The Contractor from the time of taking possession of site must provide security light and protection to the works*				
1.0.7	*Remove rubbish from time to time as may be direct to leave the work clean on completion*				
	Agent / Foreman In-charge				
1.0.8	*Include for the establishment and maintenance of temporary site office and store*				
	Setting-out of the Works				
1.0.9	*Allow for all necessary stakes, templates, rodes, instruments and the like for the proper setting-out and execution tof the works and make such available to the Consultant for necessary checking*				
	Hoarding				
1.0.10	*Temporary fencing, hoardings, screens and similar items*				
	Progress photographs				

1.0.11	*Provide one set of progress photographs to the Consultant each month during the duration of the Works. Each set of photographs shall consist of at least four (4) photographs taken from different vantage points on the site*				
	Project Sign Board				
1.0.12	*The Contractor shall allow for providing a timber or wooden board size 1.20m x 1.20m overall, mounted on 2No 2x4 Hard Wood of total height 2.8m (of which 0.6m will be buried in ground) in 2 prominent position on the site bearing the tittle of the Project, the names of the Employer and Consultant and such other information as the Consultant may direct*				
	Environmental safeguard				
	Allow a provisional sum of GHc 5000 for environmaental and social safeguard aquisition (EPA)				
	Testing Materials				
1.2.12	*Project Proposed Drawing*				
	BILL No. 1: GENERAL CONDITIONS AND PRELIMINARIES CARRIED TO GENERAL SUMMARY				

Bill No. 2: Main Works					
2.1.0.0 : Substructure					
	CONSTRUCTION OF 6 SEATER W/C TOILET AT BATTOR R/C SCHOOL				
	Site Clearance				
2.1.1	*Clear site of all vegetation and other growth and dispose*	*12*	*m2*		
	Site Preparation				
2.1.2	*Remove vegetable topsoil; 150mm depth, keep in spoil h*	*5*	*m2*		-
	Excavation				

	Foundation excavation, commencing 150mm below original ground level; not exceeding 2m deep				
2.1.3	*Strip*	*1*	*m3*		*-*
	Disposal				
	Excavated material off site				
2.1.4	*To any location at the discretion of the contractor*		*item*		
	Retaining excavated material on site for use				
2.1.5	*To temporary spoil heaps; all excavated materials*	*1*	*m3*		*-*
	Filling obtained from excavated material				
2.1.6	*Back filling to foundation with material obtained from temporary spoil heaps, exceeding 500mm thick, compacted in 200mm layers*	*3*	*m3*		*-*
	Approved imported natural filling material				
2.1.7	*Beds, not exceeding 500mm thick, compacted in 200mm layers, level*	*5*	*m3*		*-*
	In-situ concrete works				
	Plain in-situ concrete C15-25mm aggregate *Horizontal work, thickness not exceeding 300mm, poured on or against earth*				
2.1.8	*Blinding,*	*1*	*m3*		*-*
	Plain in-situ concrete C25-25mm aggregate *Horizontal work, thickness not exceeding 300mm, poured on or against earth*				
2.1.9	*Strip foundation*	*1*	*m3*		
2.1.10	*Bed*	*1*	*m3*		*-*
				C/f	***-***
				B/f	***-***
	Reinforced vibrated in-situ concrete C30-20mm *Vertical work, thickness not exceeding 300mm, poured on or against earth*				

2.1.11	*Column*	*1.00*	*m3*		*-*
	<u>Formwork</u> *<u>Plain formwork</u>*				
2.1.12	*Edges of horizontal work, 150mm width*	*12*	*m*		*-*
2.1.13	*Sides of isolated columns, rectangular, Propping ≤ 3m high, 28nr*	*8*	*m2*		*-*
	<u>Reinforcement</u> *<u>Mild steel bars to BS 4449; ribbed</u>*				
2.1.14	*12mm diameter; bent in columns and column bases*	*0.240*	*t*		*-*
2.1.15	*Links; 8mm diameter*	*0.04*	*t*		*-*
	<u>Masonry</u> *<u>Concrete block wall in cement sand (1:4) mortar, built against other work</u>*				
2.1.16	*150mm thick*	*12*	*m2*		

				Substructure	***-***
Bill No. 2: Main Works					
2.2.0.0 : In situ Concrete					
	Reinforced vibrated in-situ concrete C30-20mm aggregate;				
	Horizontal work, thickness not exceeding 300mm				
2.2.1	*Ring beams/ lintel/ slab*	*1*	*m3*		*-*
	Vertical work,				
2.2.2	*Column; thickness not exceeding 300mm*	*1*	*m3*		*-*
	Formwork				
	Plain formwork				
	Rectangular form, Propping not exceeding 3m high				
2.2.3	*Sides and soffits of beams and slab*	*4*	*m2*		*-*
	Sides of isolated columns, Propping over 3m but not exceeding 4.5m;				
2.2.4	*Rectangular,*	*14*	*m2*		*-*
	Reinforcement				
	Mild steel bars, to BS 4449; ribbed				
2.2.5	*12mm diameter, straight, in columns*	*0.19*	*t*		*-*
2.2.6	*12mm diameter, straight, in beams*	*0.21*	*t*		*-*
2.2.6	*12mm diameter, straight, in slab*	*0.23*	*t*	*-*	*-*
2.2.7	*8mm, links*	*0.20*	*t*	*-*	*-*

				In situ Concrete	**-**

Bill No. 2: Main Works

2.3.0.0 : Masonry

	Block Walling *Concrete blockwall, 450 x 225mm solid; compressive strength 2.5N/mm²; in cement sand (1:4) mortar, built against other work*				
2.3.1	*125mm thick*	*13*	*m2*		*-*
				Masonry	**-**

Bill No. 2: Main Works					
2.4.0.0 : Carpentry					
	Structural timbers				
	Sawn Timber, treated with two coats of soligmun preservative				
2.4.1	*50mm x 150mm rafters*	*21*	*m*		*-*
2.4.2	*50mm x 75mm purlins*	*25*	*m*		*-*
2.4.3	*50mm x 150mm ridge piece*	*5*	*m*		*-*
	Backing and other first fix timbers *Framed grounds*				
2.4.4	*50mm x 50mm treated timber noggins at 600mm centers both ways including 50mm x 50mm x 1200mm average length hangers nailed to hardwood where appropriate*	*14*	*m2*		*-*
	Fascias				
	18mm x 225mm sawn timber				
2.4.5	*Horizontal at eaves*	*14*	*m*		*-*
	Soffit board				
	6mm thick plywood board ceiling with 50mm x 10mm treated hardwood batten to plywood joints and forming approved partarn on ceiling; width exceeding 600mm; fix to hardwood				
2.4.6	*Horizontal*	*15*	*m2*		*-*
				Carpentry	***-***

Bill No. 2: Main Works					
2.5.0.0 : Sheet roof Covering					
	Sheet Metal *0.3mm guage coloured long span aluminium roofing sheet; coloured from "Aluworks" or approved equal nailed to hardwood according to manufactures instruction*				
2.5.1	*Coverings > 500mm wide; sloping 25° to the horizontal*	*24*	*m2*		*-*
	Boundary Work *0.40mm guage Preformed aluminium; 450mm girth*				
2.5.2	*Capping*	*4*	*m*		*-*
				Sheet Roof Covering to Main Summary	

Bill No. 2: Main Works					
2.6.0.0 : Windows, Screen and Lights					
	Window and Window Frames *125mm x 44mm thick treated hard wood frames, including 12mm x 40mm stops fixed on sill and undersider of header, drill holes in jambs at 200mm centers for 16mm diameter high tensile bars, fibre glass netting laid over frame, 50 x 50mm galvanized steel mesh over frame and edge finished with 12mm x 44mm hardwood batten complete; secured to masonry wall*				
2.6.1	*800mm header and sill; 1200mm jambs, in one bay*	*1*	*nr*		*-*
2.6.2	*800mm header and sill; 600mm jambs, in one bay*	*3*	*nr*		*-*
	Louvres and Frames *Aluminium louvre carriers with clips; screwed to hardwood frame with screws to match, "Naco" or approved equal*				
2.6.3	*8-blade frame; 1144mm length*	*1*	*nr*		*-*
2.6.4	*4-blade frame; 5842mm length*	*3*	*nr*		*-*
	Glazing *150mm x 6mm thick plain obscure glass blades fixed to louvre frames*				
2.6.5	*675mm length*	*20*	*nr*		*-*
				Windows, Screen and Lights	***-***

Bill No. 2: Main Works					
2.7.0.0 : Doors, shutters and hatches					
	Door *44mm thick hardwood panel doors, fixed to 50mm x 125mm thick frames (measured separately), number of panels at the discretion of contractor but approved by project manager*				
2.7.2	*700mm x 2050m total size, single leaf door*	*4*	*nr*		*-*
	Door Frames				
2.7.4	*50mm x 125mm treated hard wood, secured to block wa*	*18*	*m*		*-*
	Door Lining				
2.7.5	*75mm x 20mm treated hard wood, fixed to door frames a*	*25*	*m*		*-*
	Ironmongery *Supply and fix the following stainless steel Ironmongery to hardwood with screws to match*				
2.7.6	*100mm butt hinges*	*4*	*prs*		*-*
2.7.7	*Euro-profile cylinder mortice sashlock with single cylinder; keyhole escutcheons; round rose sprung loaded lever furniture*	*4*	*nr*		*-*
2.7.8	*Indicator lock as*	*4*	*nr*		*-*
				Doors, shutters and hatches	***-***
Bill No. 2: Main Works					
2.8.0.0 : Glazing					
	Mirrors *Glass BS 952 polished mirror*				

	Mirrors; clear float, silvered and protected with copper backing, undercoat paint and stoved enamel; fixing to masonry				
2.8.1	*600 x 400 x 5mm thick wall mirrors; edges polished*	*1*	*nr*		*-*
				Glazing	***-***
Bill No. 2: Main Works					
2.9.0.0 : Floor, Wall, Ceiling and Roof Finishings					
	Finish to Floor				
	Screeded Beds				

	Cement and sand (1:4) mortar; width not exceeding 600mm; level to falls not exceeding 15 ^{o} to the horizontal				
2.9.1	*44mm thick screeded bed, to receive floor tiles*	*24*	*m2*		*-*
	Floor Tiles				
	400 × 400 × 8mm Porcelain non slip floor tiles laid in an approved pattern with Kerabond or other approved equal adhesive on screeded bed				
2.9.2	*Width not exceeding 600mm*	*21*	*m2*		*-*
	Finish to walls				
	Wall Tiles				
	Ceramic tiles, glazed; 2mm joints, fixing with adhesive cement; grouting with grey cement grout				
2.9.3	*600 x 300 x 6mm units to walls on cement and sand base; width exceeding 600mm wide (internal)*	*28*	*m2*		*-*
	Cement and sand (1:3) mortar				
2.9.4	*13mm thick backing to receive wall tiles; width exceeding 600mm*	*28*	*m2*		*-*
2.9.5	*19mm thick finish to blockwall or concrete; width exceeding 600mm*	*42*	*m2*		*-*
				Floor, Wall, Ceiling and Roof Finishings	***-***
Bill No. 2: Main Works					
2.10.0.0 : Decorations					
	Prepare and apply one coat preparatory primer and two full coats semi-gloss acrylic emulsion paint to geneal surfaces				

2.10.1	*Rendered surface of block wall, girth ≥ 300mm*	*12*	*m2*		*-*
	<u>One coat preparatory primer; two full coats latex paint to general surfaces</u>				
2.10.3	*Soffit of plywood ceiling, girth ≥ 300mm*	*10*	*m2*		*-*
	<u>Prepare, one coat aluminium wood primer to general surfaces; carried out on site before fixing members</u>				
2.10.4	*Fascia board; girth not exceeding 300mm*	*11*	*m*		*-*
2.10.5	*Door frames; girth not exceeding 300mm*	*21*	*m*		*-*
2.10.6	*Doors; girth exceeding 300mm*	*40*	*m2*		*-*
2.10.7	*125mm x 44 mm window frame, 800mm header and sill; 1200mm jambs, in one bays*	*2*	*nr*		*-*
2.10.8	*Ditto; 800mm header and sill; 600mm jambs, in one bay*	*12*	*nr*		*-*
	<u>Prepare, one under coat and two finishing coats of oil base paint to general surface</u>				
2.10.9	*Fascia board; girth not exceeding 300mm*	*11*	*m*		*-*
2.10.10	*Door frames; girth not exceeding 300mm*	*19*	*m*		*-*
2.10.11	*125mm x 44 mm window frame, 800mm header and sill; 1200mm jambs, in one bays*	*2*	*nr*		*-*
2.10.12	*Ditto; 800mm header and sill; 600mm jambs, in one bay*	*12*	*nr*		*-*
2.10.13	*Doors; girth exceeding 300mm*	*40*	*m2*		*-*
	<u>Prepare, two undercoats primer and two finishing coats full gloss finish; girth not exceeding 300mm; general surfaces</u>				
2.10.14	*16mm diameter steel bar in window frames*	*25*	*m*		*-*

				Decorations	**-**
Bill No. 2: Main Works					
2.11.0.0 : Furniture, Fittings and Equipment					
	Sanitary Appliences and fittings				
	Fittings without services				
2.11.1	*Supply and install Chromium plated toilet roll holder, plugged and screwed to blockwall*	*3*	*nr*		*-*
2.11.2	*Supply and install approved heavy duty soap dispensers*	*1*	*nr*		*-*
	Fittings with services				
	Provide and install where shown on Drawings the following Sanitary Appliances including assembling and jointing together; Item shall be TWYFORD / ARMITAGE SHANKS or approved equal:-				
2.11.3	*Heavy duty low level W.C. suite comprising, vitreous china washdown pan with "S" trap, plugged and screwed to concrete floor on 9 litre virtreous china flushing close couple cistern joint to pan with all necessary accessories*	*3*	*nr*		*-*
2.11.4	*White glazed fine clay wash hand basin "TWYFORDS" or approved equal, complete with chromium plated faucets and wash fittings fixed to blockwork on pair of cantilever brackets*	*1*	*nr*		*-*
	Allow the provisional sum of GH₵ 47000.00 For construction of septic tank and installation of 2000liter polytank with all necessary assessories		*sum*		

				Furniture, Fittings and Equipment	***-***

Bill No. 2: Main Works

	SUMMARY				
2.1.0	*Substructure*				-
2.2.0	*In situ Concrete*				-
2.3.0	*Masonry*				-
2.4.0	*Carpentry*				-
2.5.0	*Sheet Roof Covering to Main Summary*				-
2.6.0	*Windows, Screen and Lights*				-
2.7.0	*Doors, shutters and hatches*				-
2.8.0	*Glazing*				-
2.9.0	*Floor, Wall, Ceiling and Roof Finishings*				-
2.10.0	*Decorations*				-
2.11.0	*Furniture, Fittings and Equipment*				-

	BILL No. 1 - PRELIMINARIES				-
	BILL NO. 2 - 4 SEATER WC TOILET				-
	Subtotal				-
	TOTAL CARRIED TO CERTIFICATE				**-**