BILL OF QUANTITIES

South Sudan Enhancing Community Resilience and Local Governance Project (ECRP II)

Project Description: Expansion of 3 classroom block with office attached, at Mukta Primary school; & Expansion of 4 classrooms in Ngo-dakalla primary school and supply pupils Benches and desks including teachers' desks at Wau North Payam. **Tender No.09**

Name of Bidder:

ITEM	DESCRIPTION	QTY	UNIT	UNIT RATE (USD)	AMOUNT (USD)
BILL NO. 1	**PRELIMINARIES**				**$ -**
	Notes:				
	All the Bidders are requested to refer "Pricing Preamble and notes below" and works items of this Bills of Quantities shall be priced to fulfill the requirements there-in. Also see that no page or items are missing prior to pricing of this bill of quantities.	Note			
	A list of typical general items are given below. However, the Bidder is requested to price only those items that may affect this Contract.	Note			
	If no price has been stated against any item hereunder, the Contractor shall not be entitled to claim any money for such items even though he is obliged to execute the work or provide services described therein. Preliminary items priced by the Tenderer are deemed to include the cost of unpriced items.	Note			
	Cost and expenses in connection with any other preliminary item which is not listed below, but is necessary for the due completion of works, is deemed to be included in the tender rates.	Note			
1.1	**Mobilization and Site Facilities**				**$ -**
1.1.1	Mobilization of all required Construction materials ,equipments and personel to project site.	Lump Sum	1.00		$ -
1.1.2	The contractor shall provide adequate space to serve as a temporary site office and fit it with the required facilities for his own site management staff The contractor shall provide adequate space to serve as a temporary site stores or space for storage of plant and materials for the work herein. The contractor shall provide toilet facilities for his workers and the Engineers within the site as directed and with Sanitary conditions meeting WHO Standards.	Lump Sum	1.00		$ -
1.1.3	The contractor shall provide necessary protective fencing/site hoarding, lighting, watchmen and other precautions and maintain for entire construction period.	Lump Sum	1		$ -
	PLATES				
	Fabricate a metal visibility plate 100 x 80 mm to be wall mounted. Art work of name board will be issued by IOM	Each	5.00		$ -
1.1.4	Fabricate and install a sign post stand, 1m x 1.2m metal signboad on a 1.8m stand with a concrete foundation (min. 0.40 x 0.40 x 0.60 m, as directed by the Site Engineer). Concrete class C-25 (1:1:2) with RHS 40 x 40 x 2.5mm posts and 2mm thick sheet metal sign.	Each	1.00		$ -
	Sites Operations				**$ -**
1.1.5	Allow for setting out of works in accordance with drawings; liaise with client to establish exact boundaries and other written information given by the Engineer and obtain written approval from the relevant government authorities for setting out, street and building lines before commencements of construction; Checking of any setting out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof.	Lump Sum	1		$ -
1.1.6	Allow for supplying water for the Works and facilities of the contractor including connection, distribution system for the work, internal arrangements and all payment to the authorities for connections. It is the responsibility of the Contractor to ensure steady and uninterrupted water supply to Works.	Lump Sum	1		$ -
1.1.7	Allow for maintaining daily records in the manner required by the Engineer to indicate factual details of, Workers, materials , Machinery and Equipment, Weather	Lump Sum	1		$ -
1.1.8	Allow for maintaining the sites in clean and orderly fashion at all times and during the entire contract period. Materials, cement etc. shall be kept neatly stacked on the site with all access-ways kept clear. All dust, debris and rubbish etc., arising out of his own works shall be continually cleared and removed from the site. The Engineer's Representative shall certify a percentage of the monthly rate or shall completely suspend the monthly amount if the contractor's maintenance is found to be unacceptable.	Lump Sum	1		$ -
1.1.9	Allow for providing all necessary safety measures to workmen (provision for proper usage of Personal protective equipment (PPE)). The bidder should submit his comprehensive safety plan with description and number in each safety device and other safety equipment proposed. The Engineer's Representative has the right to pay a percentage of the monthly component to suit the percentage accomplishment of this safety plan.	Lump Sum	1		$ -

	Insurances, Bonds & Fees				**$ -**
1.1.10	Allow for Contractor's All Risk Insurance Policy, including third party liability and from the starting date until the defects liability certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the works, plant, materials, and equipment) which are not employers risk but are contractors risk Allow for insurance against claims for worker's compensation. Engineer's and Consultant's representatives, shall be included in the Insurance Policy. Allow for insurance against loss or damage to the works, adjacent structures, any existing overhead and/or underground services that may cause damages during the construction	Lump Sum	1		$ -

	Environmental and Social Safeguarding Requirements				**$ -**
1.1.12	*Allow for providing all necessary safety measures to workmen (provision for proper usage of Personal protective equipment (PPE). The bidder should submit his comprehensive safety plan with description and number in each safety device and other safety equipment proposed. The Engineer's Representative has the right to pay a percentage of the monthly component to suit the percentage accomplishment of this safety plan.*				
1.1.13	Conduct environmental and social risk assessment and management on all subproject sites including conducting inspections to ensure adherenace to the requirment of IOM and the World Bank	**Lump Sum**	1		$ -
1.1.14	Provide resources to ensure a safe working enviroment including signage, access control,fall protection equipment and devices, ocupational safety and health equipment, and first aid kit.	Lump Sum	1		$ -
1.1.15	Ensure measures are put in place to guarantee community safety including stakeholder engagement and information disclosure	Lump Sum	1		$ -
1.1.16	Acquire all relevant Environmental perts, licenses and authorisation prior to engaging in any activities that require such. This includes adhereing to conditions of any licenses issues.	Lump Sum	1		$ -
1.1.17	Rehabilitate and ensure maintanace of aesthetic environment including ensuring the sound management of waste on all sites.	Lump Sum	1		$ -
1.1.18	Ensure there is a designated qualified and competent environmental and social safeguards specialist within the contrcator's team atleast for each subproject site.	Month	6		$ -
ITEM	**BILL OF QUANTITIES (BOQ) FOR 4-CLASSROOM BLOCK SCHOOL**	QTY	**UNIT**	**RATE (USD)**	**AMOUNT (USD)**
BILL NO. 2	**BOQ CONSTRUCTION OF 4-CLASSROOM BLOCK**		**1**		**$ -**
2	**SUBSTRUCTURE**				**$ -**
	Excavation				
2.1.1	Site clearance and removal of debris from site as directed	422.4	m2		$ -
2.1.2	Excavate to remove loose top soil not exceeding 0.3 meters deep and cart away as directed	422.4	m2		$ -
2.1.3	Excavate in soft material for foundation trenches not exceeding 1.8m deep starting from stripped level	156.5	m3		$ -
2.1.4	Ditto: Column bases, Verandah post, splash apron and Ramp	53.6	m3		$ -
	Backfilling				$ -
2.1.5	Return, fill in and ram selected excavated material around foundations and splash apron	49.0	m3		$ -
	Disposal of Surplus spoils				$ -
2.1.6	Load and cart away surplus material from site to an approved dumping site	33.8	m3		$ -
	Crushed stone fill				$ -
2.1.7	200mm thick hardcore (crushed stone) compacted in layers not exceeding 100mm deep and well watered under slab, Verandah and ramps	48.0	m3		$ -
	Imported/selected filling/material				$ -
2.1.8	min 500mm thick compacted selected fill to grade	136.4	m3		$ -
2.1.9	Ditto to ramps	11.5	m3		$ -
2.1.10	Ditto to Splash apron	14.0	m3		$ -
	Anti-termite treatment				$ -
2.1.11	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	445.5	m2		$ -
2.1.12	Ditto to ramps	28.8	m2		$ -
	Damp Proofing				$ -
2.1.13	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	297.0	m2		$ -
2.1.14	Ditto to ramps	19.2	m2		$ -
	Concrete work in substructure				$ -
	Plain concrete class 15 (mix 1:3:6)				$ -
2.1.15	50mm Thick surface blinding under foundations	2.8	m3		$ -
2.1.16	Ditto: Under column bases, Ramp and verandah post	1.2	m3		$ -
	In Situ concrete class 25, vibrated and reinforced as described, in:-				$ -
2.1.17	Strip Footing	21.2	m3		$ -
2.1.18	Column bases and Verandah post	2.5	m3		$ -
2.1.19	Columns in foundations	1.7	m3		$ -
2.1.20	Ground beam (300x200)mm	6.1	m3		$ -
	Ramp	2.9	m3		$ -
2.1.21	100mm thick ground floor slab (classrooms & Verandah) C-25 concrete	29.7	m3		$ -

2.1.22	600mm wide stone chipping aggregates Splash Apron1:4 cement Sand ratio	7.0	m3		$	-
	Reinforcement				$	-
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				$	-
2.1.23	8mm diameter bars	268.8	kg		$	-
2.1.24	10mm diameter bars	2953.2	kg		$	-
2.1.25	12mm diameter bars	793.4	kg		$	-
	Mesh reinforcement ; B.S. 4483 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks				$	-
2.1.26	Ditto to ramps	19.2	m2		$	-
	Sawn formwork to:				$	-
2.1.27	Vertical sides of ground beam	85.2	m2		$	-
2.1.28	Vertical sides of columns	33.1	m2		$	-
2.1.29	Edges of 100mm high ground floor slab	19.8	m2		$	-
2.1.30	Edges of 150mm high ramps	4.8	m2		$	-
	Foundation walling				$	-
	Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm2;bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.					
2.1.31	200mm thick walls	104.3	m2		$	-
	Plinths				$	-
2.1.32	12 mm thick cement : sand (1:3) plaster to plinth	104.3	m2		$	-
2.1.33	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	104.3	m2		$	-
2.2	**STRUCTURAL FRAME**				**$**	**-**
	Concrete work in superstructure- In Situ concrete class 25, vibrated and reinforced as described, in:-					
2.2.1	Column (200x200)	1.9	m3		$	-
2.2.2	Ring beam	4.1	m3		$	-
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				$	-
2.2.3	8mm diameter bars	256.9	kg		$	-
2.2.4	12mm diameter bars	833.1	kg		$	-
	RHS section steel column Supporting the roof at the Verendah				$	-
2.2.5	RHS100x3mm Steel columns supporting roof at the verendah	9.0	No		$	-
	Sawn formwork				$	-
2.2.6	Vertical sides of Columns	44.7	m2		$	-
2.2.7	Ring beam	63.2	m2		$	-
	WALLING				$	-
	Damp proof Course				$	-
	Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured nett allow for 300mm laps):-				$	-
2.2.8	200mm wide	101.0	m		$	-
	Walling				$	-
	Solid blocks 200mm thick				$	-
2.2.9	200mm thick walls reinforced with two lines of hoop iron after every three courses	177.6	m2		$	-
2.2.10	50mm Concrete Window cill	20.8	m		$	-
2.2.11	20 SWG Hoop Iron wall tie 25mm wide x 450mm long cast 75mm into concrete and built into joint of block walling.	60.0	Item		$	-
2.2.12	Gable end with vent 600mm Ø	14.7	m2		$	-
2.3	**ROOF AND RAIN WATER DISPOSAL**				**$**	**-**
	Roof Construction					
	Option #1: either **Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.**					
2.3.1	50 x 50 x 3mm Bottom chord, welded to the top of column	95.4	m		$	-
2.3.2	50 x 50 x 3mm Top chord/rafters welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	100.8	m		$	-
2.3.3	40 x 40 x 3mm SHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	144.1	m		$	-
2.3.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	99.1	m		$	-
2.3.5	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	404.4	m		$	-
2.3.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	40.0	Nr		$	-
2.3.7	150x150x8mm plate (fillet weld of 6mmthick) welded to the truss and colum	14.0	Nr		$	-
	Roof Covering				$	-
2.3.8	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets (0.5mm) of approved colour: fixed with J-bolts to 100 x 50 x 2mm zed purlins (measured	377.4	m2		$	-

2.3.9	Supplying & fixing of an approved heat insulation layer fixed to purlins according to manufacturer's specifications.	377.4	m2		$	-
2.3.10	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	33.7	m		$	-
	Valance / Barge Board				$	-
2.3.11	25x225mm high timber valance board / barge board bolted to 100 x 100 x 8mm thick mild steel plate with 4 No 12mm diameter bolts : plates welded to edges of rafters: all complete with approved wood preservative as specified and as per Drawing.	78.6	m		$	-
	Rain Water Disposal				$	-
	Supply and fix rain water system to manufacturer's instructions.				$	-
2.3.12	250x350 GMS 2mm thick gutter with its accessories and fittings	67.40	m		$	-
2.3.13	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	4.00	Nr		$	-
2.3.14	10000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum		$	-
2.3.15	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum		$	-
2.3.16	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum		$	-
2.3.17	Storm water drainage	78.60	m		$	-
	DOORS AND WINDOWS				**$**	-
	Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.					
	Door Shutter					
2.3.18	Steel doors to fit structural opening size 950mm x 2700mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Bugalar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the enterior side. Ironmongry stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	4.0	Nr		$	-
	Painting and Decorating				$	-
	Prepare and apply two coats of brown rust inhibiting primer finished with two coats of white matt oil paint on metal:-				$	-
2.3.19	Surfaces steel plated doors and steel frames	20.5	m2		$	-
	WINDOWS				$	-
	Purpose made steel casement windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Supply and fix ironmongery comprising approved hinges, stays, fasteners to opening lights: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.				$	-
	Supply and fix the following				$	-
2.3.20	W1. 1200x1600mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glased with 5mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazings on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongry stainless steel pull-push bar handle	32.0	Nr		$	-
2.3.21	Burglar proofing grille comprising 12mm high yield tensile bars 150mm centres vertical and 300mm centres horizontal in cobweb pattern having one coat of red oxide primer to fit the above window sizes.	870.4	m		$	-
2.3.22	Iron Mongery and matching fixing	32.0	Nr		$	-
2.3.23	Fastener	32.0	Nr		$	-
2.3.24	Stay	32.0	Nr		$	-
	Ordinary quality(OQ) clear sheet glass and glazing				$	-
2.3.25	4mm glass: glazing to metal casement panes 0.1-0.5mm2 with tropical glazing putty	61.4	m2		$	-
2.4	**ELECTRICAL INSTALLATIONS**				**$**	-
	Earthing					
2.4.1	Supply and install Earthing of DC installation at the combiner box on the roof comprising of 25sq.mm SC PVC insulated copper cable from the roof to copper earth electrode of size 1200mm long x15mm diameter enclosed by a concrete manhole of size 300x300x200mm with removable cover	1.0	Lumpsum		$	-
	TESTING & COMMISSIONING				$	-
2.4.2	Allow for testing and commissioning for earthing installations system	1.0	Lumpsum		$	-
2.5	**FINISHES**				**$**	-
	Floor Finishes: Cement and sand (1:3) screeds and pavings: one coat: steel trowel finish: laid on concrete					
2.5.1	50mm thick screeding.	*283.4*	*m2*		*$*	-
	External wall finishes: Cement and sand(1:4)				*$*	-
2.5.2	15mm thick to walls and concrete surfaces	178.6	m2		*$*	-

2.5.3	300mm x 10mm rendered skirt	104.0	m		*$*	-
	walls				*$*	-
	Prepare surfaces: apply three coats weather guard emulsion paint;				*$*	-
2.5.4	Rendered surfaces: walls	178.6	m2		*$*	-
	Skirt				*$*	-
	Prepare surfaces: apply three coats bituminous paint;				*$*	-
2.5.5	Skirt	104.0	m		*$*	-
	Internal Wall finishes Cement/lime putty/sand(1:2:9)				*$*	-
2.5.6	15mm plaster to: walls and concrete surfaces: steel trowelled smooth	212.2	m2		*$*	-
2.5.7	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint: on steel trowelled plaster: to Skirting	104.0	m		*$*	-
	FITTINGS & FIXTURES				*$*	-
	The following in 4 No. Pin boards each classroom size as directed by the Engineer				*$*	-
2.5.8	15mm thick 'cellotex, soft board (in 3 No.)	30.4	m2		*$*	-
2.5.9	25 x 50mm beading to edges of pin boards	48.0	m		*$*	-
2.5.10	Prepare and apply one under coat and two coats of emulsion paint : on	30.4	m2		*$*	-
2.5.11	General surfaces: soft board lining	29.2	m		*$*	-
2.5.12	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	30.4	m2		*$*	-
2.5.13	Surfaces 25 x 50mm girth: edge trim	48.0	m		*$*	-
2.5.14	The following in blackboards: size 3m x 1.2m high (in 1 No)	14.4	m2		*$*	-
2.5.15	20mm thick internal lime plaster to walls internally	28.8	m2		*$*	-
2.5.16	Prepare and apply three coats of black bit mastic paint to blackboard surfaces	43.2	m2		*$*	-
2.5.17	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	24.0	m		*$*	-
	Railings				*$*	-
2A.7.5	Handrails for length of ramps on both sides, CHS 50mm dia. and 2.5 mm thickness, painted with 2 coats of antirust paint and 1 coat of enamel paint	2.00	**Pairs**		*$*	-
2A.8	**CLASSROOM FURNITURE**				**$**	-
	Furniture supply, as laid out in drawings. Contractor to provide shop drawings or manufactuer specifications for approval by Engineer					
2A.8.1	Student desk and bench, Desk size 120x40cm surface, 75cm high; Bench size 120x28cm seating area, 50cm high	96.00	**Nr**		$	-
2A.8.2	Teacher's table, Desk size 150x75 cm surface, 75cm high	2.00	**Nr**		$	-
2A.8.3	Teacher's chair, wood or metal	2.00	**Nr**		$	-
ITEM	**BILL OF QUANTITIES (BOQ) FOR 3-CLASSROOM BLOCK SCHOOL**	QTY	**UNIT**	**RATE (USD)**	**AMOUNT (USD)**	
BILL NO. 3	**BOQ CONSTRUCTION OF 3-CLASSROOM BLOCK**		**1**		**$**	-
3	**SUBSTRUCTURE**				$	-
	Excavation					
3.1.1	Site clearance and removal of debris from site as directed	422.4	m2		$	-
3.1.2	Excavate to remove loose top soil not exceeding 0.3 meters deep and cart away as directed	422.4	m2		$	-
3.1.3	Excavate in soft material for foundation trenches not exceeding 1.8m deep starting from stripped level	38.1	m3		$	-
3.1.4	Ditto: Column bases, Verandah post, splash apron and Ramp	36.7	m3		$	-
	Backfilling				$	-
3.1.5	Return, fill in and ram selected excavated material around foundations and splash apron	22.7	m3		$	-
	Disposal of Surplus spoils				$	-
3.1.6	Load and cart away surplus material from site to an approved dumping site	33.8	m3		$	-
	Crushed stone fill				$	-
3.1.7	200mm thick hardcore (crushed stone) compacted in layers not exceeding 100mm deep and well watered under slab, Verandah and ramps	45.3	m3		$	-
	Imported/selected filling/material				$	-
3.1.8	min 500mm thick compacted selected fill to grade	106.1	m3		$	-
3.1.9	Ditto to ramps	7.2	m3		$	-
3.1.10	Ditto to Splash apron	14.4	m3		$	-
	Anti-termite treatment				$	-
3.1.11	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	305.3	m2		$	-
3.1.12	Ditto to ramps	28.8	m2		$	-
	Damp Proofing				$	-
3.1.13	1000 gauge polythene sheet damp proof membrane: to floors: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive concrete floor bed (m/s) - measured net with no allowance for overlaps	223.2	m2		$	-
3.1.14	Ditto to ramps	19.2	m2		$	-
	Concrete work in substructure				$	-
	Plain concrete class 15 (mix 1:3:6)				$	-

3.1.15	50mm Thick surface blinding under foundations	2.0	m3		$	-
3.1.16	Ditto: Under column bases, Ramp and verandah post	1.2	m3		$	-
	In Situ concrete class 25, vibrated and reinforced as described, in:-				$	-
3.1.17	Strip Footing	15.9	m3		$	-
3.1.18	Column bases and Verandah post	6.1	m3		$	-
3.1.19	Columns in foundations	1.7	m3		$	-
3.1.20	Ground beam (300x200)mm	4.7	m3		$	-
	Ramp	2.9	m3		$	-
3.1.21	100mm thick ground floor slab (classrooms & Verandah) C-25 concrete	22.3	m3		$	-
3.1.22	600mm wide stone chipping aggregates Splash Apron1:4 cement Sand ratio	5.7	m3		$	-
	Reinforcement				$	-
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				$	-
3.1.23	8mm diameter bars	223.8	kg		$	-
3.1.24	10mm diameter bars	2216.0	kg		$	-
3.1.25	12mm diameter bars	615.3	kg		$	-
	Mesh reinforcement ; B.S. 4483 weighing 3.22 kgs per square meter including bends, tying wire and spacing blocks				$	-
3.1.26	Ditto to ramps	19.2	m2		$	-
	Sawn formwork to:				$	-
3.1.27	Vertical sides of ground beam	66.0	m2		$	-
3.1.28	Vertical sides of columns	35.0	m2		$	-
3.1.29	Edges of 100mm high ground floor slab	14.9	m2		$	-
3.1.30	Edges of 150mm high ramps	4.8	m2		$	-
	Foundation walling				$	-
	Solid concrete block walling (mix 1:3:6); with minimum comprehensive strength of 7.0N/mm2;bedded and jointed in cement sand (1:3) mortar; reinforced with gauge 20 hoop iron after every alternate course.				$	-
3.1.31	200mm thick walls	79.4	m2		$	-
	Plinths				$	-
3.1.32	12 mm thick cement : sand (1:3) plaster to plinth	79.4	m2		$	-
3.1.33	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	79.4	m2		$	-
3.2	**STRUCTURAL FRAME**				**$**	**-**
	Concrete work in superstructure- In Situ concrete class 25, vibrated and reinforced as described, in:-					
3.3.1	Column (200x200)	2.1	m3		$	-
3.3.2	Ring beam	3.2	m3		$	-
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				$	-
3.3.3	8mm diameter bars	208.4	kg		$	-
3.3.4	12mm diameter bars	711.4	kg		$	-
	RHS section steel column Supporting the roof at the Verendah				$	-
3.3.5	RHS100x3mm Steel columns supporting roof at the verendah	7.0	No		$	-
	Sawn formwork				$	-
3.3.6	Vertical sides of Columns	47.2	m2		$	-
3.3.7	Ring beam	47.3	m2		$	-
	WALLING				$	-
	Damp proof Course				$	-
	Three- ply bituminous felt damp proof course bedded in cement and sand (1:3) mortar (measured nett allow for 300mm laps):-				$	-
3.3.8	200mm wide	76.4	m		$	-
	Walling				$	-
	Solid blocks 200mm thick				$	-
3.3.9	200mm thick walls reinforced with two lines of hoop iron after every three courses	141.9	m2		$	-
3.3.10	50mm Concrete Window cill	15.6	m		$	-
3.3.11	20 SWG Hoop Iron wall tie 25mm wide x 450mm long cast 75mm into concrete and built into joint of block walling.	60.0	Item		$	-
3.3.12	Gable end with vent 600mm Ø	14.7	m2		$	-
3.3	**ROOF AND RAIN WATER DISPOSAL**				**$**	**-**
	Roof Construction					
	Option #1: either **Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.**					
3.3.1	50 x 50 x 3mm Bottom chord, welded to the top of column	74.2	m		$	-
3.3.2	50 x 50 x 3mm Top chord/rafters welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	78.4	m		$	-
3.3.3	40 x 40 x 3mm SHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	112.0	m		$	-
3.3.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	77.1	m		$	-

3.3.5	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) including all the welding, straining, surface preparation and hoisting into position.	308.4	m		$	-
3.3.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	40.0	Nr		$	-
3.3.7	150x150x8mm plate (fillet weld of 6mmthick) welded to the truss and colum	14.0	Nr		$	-
	Roof Covering				$	-
3.3.8	Supplying & fixing of gauge 28 pre-painted Super Five IT4 profiled roofing sheets (0.5mm) of approved colour: fixed with J-bolts to 100 x 50 x 2mm zed purlins (measured separately) and rubber caping to tops of bolts	287.8	m2		$	-
3.3.9	Supplying & fixing of an approved heat insulation layer fixed to purlins according to manufacturer's specifications.	287.8	m2		$	-
3.3.10	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	25.7	m		$	-
	Valance / Barge Board				$	-
3.3.11	25x225mm high timber valance board / barge board bolted to 100 x 100 x 8mm thick mild steel plate with 4 No 12mm diameter bolts : plates welded to edges of rafters: all complete with approved wood preservative as specified and as per Drawing.	62.6	m		$	-
	Rain Water Disposal				$	-
	Supply and fix rain water system to manufacturer's instructions.				$	-
3.3.12	250x350 GMS 2mm thick gutter with its accessories and fittings	51.40	m		$	-
3.3.13	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	3.00	Nr		$	-
3.3.14	10000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum		$	-
3.3.15	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum		$	-
3.3.16	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum		$	-
3.3.17	Storm water drainage	62.60	m		$	-
	DOORS AND WINDOWS				$	-
	Note: All doors to be supplied and fixed as per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.					
	Door Shutter					
3.3.18	Steel doors to fit structural opening size 950mm x 2700mm high: RHS steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint, 180D Opening, 0.5mm casement metal pane, with Bugalar proofing with RHS 25mm x 25mm x 2mm Vertical steel bars at equal intervals welded to frames on the enterior side. Ironmongry stainless steel pull-push bar handle, 0.5mm thick steel louvers at top welded to RHS frame. Louver to be covered with approved mosquito net.	3.0	Nr		$	-
	Painting and Decorating				$	-
	Prepare and apply two coats of brown rust inhibiting primer finished with two coats of white matt oil paint on metal:-				$	-
3.3.19	Surfaces steel plated doors and steel frames	15.4	m2		$	-
	WINDOWS				$	-
	Purpose made steel casement windows manufactured from standard strong Z sections: manufacture, assemble and deliver to site: Supply and fix ironmongery comprising approved hinges, stays, fasteners to opening lights: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.				$	-
	Supply and fix the following				$	-
3.3.20	W1. 1200x1600mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glased with 5mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars welded to frames at equal spacing behind glazings on the interior side and 0.5mm thick steel louvers welded to RHS frame. Louver to be covered with approved mosquito net. Ironmongry stainless steel pull-push bar handle	21.0	Nr		$	-
3.3.21	Burglar proofing grille comprising 12mm high yield tensile bars 150mm centres vertical and 300mm centres horizontal in cobweb pattern having one coat of red oxide primer to fit the above window sizes.	571.2	m		$	-
3.3.22	Iron Mongery and matching fixing	21.0	Nr		$	-
3.3.23	Fastener	21.0	Nr		$	-
3.3.24	Stay	21.0	Nr		$	-
	Ordinary quality(OQ) clear sheet glass and glazing				$	-
3.3.25	4mm glass: glazing to metal casement panes 0.1-0.5mm2 with tropical glazing putty	40.3	m2		$	-
3.4	**ELECTRICAL INSTALLATIONS**				$	-
	Earthing					
3.4.1	Supply and install Earthing of DC installation at the combiner box on the roof comprising of 25sq.mm SC PVC insulated copper cable from the roof to copper earth electrode of size 1200mm long x15mm diameter enclosed by a concrete manhole of size 300x300x200mm with removable cover	1.0	Lumpsum		$	-

	TESTING & COMMISSIONING				$ -
3.4.2	Allow for testing and commissioning for earthing installations system	1.0	Lumpsum		$ -
3.5	**FINISHES**				**$ -**
	Floor Finishes: Cement and sand (1:3) screeds and pavings: one coat: steel trowel finish: laid on concrete				
3.5.1	50mm thick screeding.	*212.3*	*m2*		*$* -
	External wall finishes: Cement and sand(1:4)				*$* -
3.5.2	15mm thick to walls and concrete surfaces	150.5	m2		*$* -
3.5.3	300mm x 10mm rendered skirt	90.0	m		*$* -
	walls				*$* -
	Prepare surfaces: apply three coats weather guard emulsion paint:				*$* -
3.5.4	Rendered surfaces: walls	150.5	m2		*$* -
	Skirt				*$* -
	Prepare surfaces: apply three coats bituminous paint:				*$* -
3.5.5	Skirt	90.0	m		*$* -
	Internal Wall finishes Cement/lime putty/sand(1:2:9)				*$* -
3.5.6	15mm plaster to: walls and concrete surfaces: steel trowelled smooth	177.5	m2		*$* -
3.5.7	Prepare surfaces: apply three coats vinyl silk soft white emulsion paint: on steel trowelled plaster: to Skirting	90.0	m		*$* -
	FITTINGS & FIXTURES				*$* -
	The following in 4 No. Pin boards each classroom size as directed by the Engineer				*$* -
3.5.8	15mm thick 'cellotex, soft board (in 3 No.)	22.8	m2		*$* -
3.5.9	25 x 50mm beading to edges of pin boards	36.0	m		*$* -
3.5.10	Prepare and apply one under coat and two coats of emulsion paint : on	22.8	m2		*$* -
3.5.11	General surfaces: soft board lining	21.9	m		*$* -
3.5.12	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	22.8	m2		*$* -
3.5.13	Surfaces 25 x 50mm girth: edge trim	36.0	m		*$* -
3.5.14	The following in blackboards: size 3m x 1.2m high (in 1 No)	10.8	m2		*$* -
3.5.15	20mm thick internal lime plaster to walls internally	21.6	m2		*$* -
3.5.16	Prepare and apply three coats of black bit mastic paint to blackboard surfaces	32.4	m2		*$* -
3.5.17	Knot prime and stop and apply three gloss oil paint to timber surfaces not exceeding 100mm girth.	18.0	m		*$* -
	Railings				*$* -
3.5.18	Handrails for length of ramps on both sides, CHS 50mm dia. and 3.5 mm thickness, painted with 2 coats of antirust paint and 1 coat of enamel paint	2.00	**Pairs**		*$* -
3.6	**CLASSROOM FURNITURE**				**$ -**
	Furniture supply, as laid out in drawings. Contractor to provide shop drawings or manufactuer specifications for approval by Engineer				
3.6.1	Student desk and bench, Desk size 120x40cm surface, 75cm high; Bench size 120x28cm seating area, 50cm high	72.00	**Nr**		$ -
3.6.2	Teacher's table, Desk size 150x75 cm surface, 75cm high	2.00	**Nr**		$ -
3.6.3	Teacher's chair, wood or metal	2.00	**Nr**		$ -
	BILL SUMMARY				
BILL NO. 3	BOQ CONSTRUCTION OF 3-CLASSROOM BLOCK	1.00	Unit	$ -	$ -
BILL NO.4	**Construction of an office block with store attached**	1.0	**unit**		**$ -**

Project Description: Expansion of 3 classroom block with office attached, at Mukta Primary school; & Expansion of 4 classrooms in Ngo-dakalla primary school and supply pupils Benches and desks including teachers' desks at Wau North Payam.

Tender No.09

	BILL SUMMARY				
BILL NO. 1	PRELIMINARIES	1.00	UNIT	$ -	$ -
BILL NO. 2	BOQ CONSTRUCTION OF 4-CLASSROOM BLOCK	1.00	UNIT	$ -	$ -
BILL NO. 3	BOQ CONSTRUCTION OF 3-CLASSROOM BLOCK	1.00	UNIT	$ -	$ -
BILL NO.4	Construction of an office block with store attached	1.00	UNIT	$ -	$ -
		GRAND TOTAL			**$ -**