

BILL OF QUANTITIES					
South Sudan Enhancing Community Resilience and Local Governance Project (ECRP II)					
Project Description: Expansion of Hai Dinka PHCU, 1 block of 3 stance latrine with washroom, Wall Fence extension; & Construction of 400m perimeter fence in Hai Bafra Primary school, 2 blocks of 4 stance latrine (for girls having washroom and boys with urinal) at Wau North Payam.					Tender No.07
Name of Bidder:					
ITEM	DESCRIPTION	QTY	UNIT	UNIT RATE (USD)	AMOUNT (USD)
BILL NO. 1	PRELIMINARIES				\$ -
	Notes:				
	<u>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.</u>	Note			
	<u>A list of typical general items are given below. However, the Bidder is requested to price only those items that may affect this Contract.</u>	Note			
	<u>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.</u>	Note			
	<u>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.</u>	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	6.00		\$ -
1.1.4	Fabricate and install a sign post stand, 1m x 1.2m metal signboard 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	2.00		\$ -
	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	<p>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</p> <p>Allow for insurance against claims for worker's compensation. Engineer's and Consultant's representatives, shall be included in the Insurance Policy.</p> <p>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</p>	Lump Sum	1		\$ -

	Environmental and Social Safeguarding Requirements				\$ -
1.1.12	<u>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.</u>				
1.1.13	Conduct environmental and social risk assessment and management on all subproject sites including conducting inspections to ensure adherence to the requirement of IOM and the World Bank	Lump Sum	1		\$ -
1.1.14	Provide resources to ensure a safe working environment including signage, access control, fall protection equipment and devices, occupational 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 permits, licenses and authorisation prior to engaging in any activities that require such. This includes adhering to conditions of any licenses issues.	Lump Sum	1		\$ -
1.1.17	Rehabilitate and ensure maintenance 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 contractor's team at least for each subproject site.	Month	6		\$ -
BILL NO. 2	BoQ 3-STANCE LATRINE AND WASHROOM ATTACHED AT HAI DINKA PHCU NORMAL SOIL				\$ -
2.1	SUBSTRUCTURE - 1 Latrine Block, 3 Stances and washroom attached				\$ -
	Excavation and Earthwork (Provisional)				
2.1.1	Site clearance and removal of debris from site as directed	134.45	m2		\$ -
2.1.2	Excavate loose top soil average 200 deep from ground level and wheel and deposit on site as directed	134.45	m2		\$ -
2.1.3	Manual-Mass excavation for latrine pit not exceeding 1.5m deep starting from Ground level	24.00	m3		\$ -
2.1.4	Ditto exceeding 1.5-3.0m depth starting from stripped level	24.00	m3		\$ -
2.1.5	Excavate in soft material for foundation trenches and column bases not exceeding 1.8m depth starting from stripped level and 60 cm wide	21.11	m3		\$ -
2.1.6	Excavate in soft material for ramp trenches not exceeding 600mm depth	8.64	m3		\$ -
	Disposal of surplus spoils				\$ -
2.1.7	Load and cart away surplus material from site to an approved dumping site	72.75	m3		\$ -
	Selected filling				
2.1.8	200mm Thick hardcore fillings compacted in layers not exceeding 100mm deep and well watered under lobby ground slab and ramps	8.83	m3		\$ -
2.1.9	500mm Thick compacted selected fill to grade natural soil	2.67	m3		\$ -
	Damp proof membrane				
2.1.10	1000 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps)	55.41	m2		\$ -
	Concrete work in substructure				
	<u>Plain concrete class 10 (mix 1:3:6)</u>				
2.1.11	50mm Thick surface blinding under strip foundation and bottom pit	1.30	m3		\$ -
2.1.12	Ditto for columns bases	0.22	m3		\$ -
2.1.13	Ditto for ramps	0.72	m3		\$ -
	<u>In situ concrete class 25/20, vibrated and reinforced as described, in:-</u>				
2.1.14	Foundation strip (250mm thick)	2.48	m3		\$ -
2.1.15	Intermediate beams (200mm thick)	0.91	m3		\$ -
2.1.16	Column Bases (250mm thick)	1.08	m3		\$ -
2.1.17	Columns (substructure)	1.16	m3		\$ -
2.1.18	150mm thick ground floor slab over the pit and 100mm on the walk way	4.95	m3		\$ -
2.1.19	Ground beams (300mm thick by 200mm wide)	2.12	m3		\$ -
2.1.20	Ramp (minimum 100mm thick)	2.88	m3		\$ -
2.1.21	100mm thick bottom pit slab of concrete reinforced with mesh	1.60	m3		\$ -
	Reinforcement for Substructure				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.1.22	8 mm diameter bars	146.83	kg		\$ -
2.1.23	10 mm diameter bars	383.63	kg		\$ -
2.1.24	12 mm diameter bars	461.38	kg		\$ -
2.1.25	16 mm diameter bars	0.00	kg		\$ -
	<u>Mesh reinforcement : B.S. 4483 Ref A142 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks</u>				
2.1.26	Fabric mesh reinforcement for ground floor, ramp and bottom pit slab	30.40	m2		\$ -
	Sawn formwork to:-				
2.1.27	Horizontal sides of Intermediate beam 200x200-Axes A&B)@-1.4	10.42	m2		\$ -
2.1.28	Horizontal sides of foundation strip	4.13	m2		\$ -

2.1.29	Horizontal sides of ground beams and floor slabs	29.74	m2		\$ -
2.1.30	Edge of ramps	5.28	m2		\$ -
	Foundation Walling				
	<u>Solid concrete block walling (mix 1:3:6): bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
2.1.31	200mm Thick walling for pit	61.88	m2		\$ -
2.1.32	200mm thick plinth	38.30	m2		\$ -

	Plastering and Painting				
2.1.33	12 mm thick cement : sand (1:3) plaster to walling	92.04	m2		\$ -
	Sundries				
2.1.34	Allow for making squat hole openings in 150 mm slab	3.00	nr		\$ -
2.1.35	Ditto for making 600 x600 mm openings in 150 mm slab for manhole.	1.00	nr		\$ -
2.2	SUPERSTRUCTURE - 1 Latrine Block, 3 Stances and washroom attached				\$ -
2.2.1	Reinforced Concrete				
	<u>In situ concrete class 25/20, vibrated and reinforced as described, in:-</u>				
2.2.2	Ring beam	1.60	m3		\$ -
2.2.3	Columns (superstructure)	0.61	m3		\$ -
	Reinforcement				
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				
2.2.4	8 mm diameter bars	100.05	kg		\$ -
2.2.5	12 mm diameter bars	302.74	kg		\$ -
	Formwork				
	<u>Formwork in sawn finish at any level to:-</u>				
2.2.6	Sides and soffits of ring beams	24.07	m2		\$ -
2.2.7	Columns C1 & C2	16.20	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):-	31.10	m		\$ -
	<u>Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				
2.2.8	150mm Thick walls for toilet and curtain	64.60	m2		\$ -
2.3	ROOF AND RAIN WATER DISPOSAL - 1 Latrine Block, 3 Stances and washroom attached				\$ -
	<u>Contractor to allow for hoisting and all angle brackets or gusset plates, bolts, cleats, fish tailing lugs, drilling holes and the likes for fixing members to position as per the details provided.</u>		Note		
	Roof Construction				
	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing, whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection.(see the drawings)</u>				
2.3.1	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) at 900mm c/c spacing including all the welding, straining, surface preparation and hoisting into position	36.40	m		\$ -
2.3.2	16mm diam anchor bolts L=250 to be welded on steel	12.00	Nr		\$ -
2.3.3	240x150x6mm plate (fillet weld of 6mm thick) welded to the truss and column	12.00	Nr		\$ -
2.3.4	100x60x3mm RHS Rafter/top chord including all the welding, straining, surface preparation and hoisting into position	20.90	m		\$ -
	100x60x3mm RHS Tie beam/bottom chord including all the welding, straining, surface preparation and hoisting into position	19.40	m		\$ -
	Roof Covering				
2.3.5	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	42.54	m2		\$ -
	Rain Water Disposal				
	<u>Supply and fix rain water system including the all accessories required to manufacturer's instructions.</u>				
2.3.6	250x350 GMS 2mm thick gutter on both sides of the roof eave	18.20	m		\$ -
2.3.7	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	1.00	Nr		\$ -
2.3.8	1000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum		\$ -
2.3.9	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum		\$ -
2.3.10	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum		\$ -
2.3.11	Storm water drainage	25.50	m		\$ -
2.4	DOORS, WINDOWS, FINISHES, PLUMBING - 1 Latrine Block, 3 Stances and washroom				\$ -
	Doors				
	<u>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.</u>				
2.4.1	Door D1 90x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of anti-rust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	3.00	Nr		\$ -

2.4.2	Door D2 110x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr		\$ -
2.4.3	Door D3 100x210cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr		\$ -

	Windows				
2.4.4	600x600mm high windows, RHS steel frame 40x40x2mm painted with 2 coats of antirust paint & one coat of enamel paint with steel louvers	4.00	Nr	\$	-
	Finishes				
	Floor finishes				
	<u>Insitu cement and sand (1:3) screed</u>				
2.4.5	50mm thick screed for floor and ramp	38.18	m2	\$	-
	Wall Finishes				
	<u>Internal and external Walls: 12mm thick cement sand plaster, with steel trowelled finish, as described to:-</u>				
2.4.6	Internal wall plaster	88.66	m2	\$	-
2.4.7	External wall plaster	52.84	m2	\$	-
	Miscellaneous				
2.4.8	Manhole Cover (supply and form concrete for 600x600x10mm RC cover)	1.00	Nr	\$	-
	Plumbing installations				
2.4.9	PSN Seat attached with handrails support, casted with concrete and finished with tiles with pvc corner strips (400mm x 300mm x 400mm).	1.00	Nr	\$	-
	Supply and install handwash basin and 50l water bucket with its drainage (refer to hand wash details on the drawing)	1.00	lump sum	\$	-
2.4.10	Well finished squat hole with foot rest	2.00	Nr	\$	-
2.4.11	Handrails for length of ramps (on both sides)	1.00	Pairs	\$	-
2.4.12	Vent-pipe	1.00	Item	\$	-
BILL NO. 3	BoQ-Construction of 1 block of latrine with 4 stances with urinal for boys at Hai Bafra PS			\$	-
3	SUBSTRUCTURE - 1 Latrine Block, 4 Stances with urinal for boys			\$	-
3.1	Excavation and Earthwork (Provisional)				
3.1.1	Site clearance and removal of debris from site as directed (10m by 6m)	110.45	m2	\$	-
3.1.2	Excavate loose top soil average 200 deep from ground level and wheel and deposit on site as directed	134.45	m2	\$	-
3.1.3	Manual-Mass excavation for latrine pit not exceeding 1.5m deep starting from Ground level	24.00	m3	\$	-
3.1.4	Ditto exceeding 1.5-3.0m depth starting from stripped level	24.00	m3	\$	-
3.1.5	Excavate in soft material for foundation trenches and column bases not exceeding 1.8m depth starting from stripped level and 60 cm wide	19.17	m3	\$	-
3.1.6	Excavate in soft material for ramp trenches not exceeding 600mm depth	8.64	m3	\$	-
	Disposal of surplus spoils			\$	-
3.1.7	Load and cart away surplus material from site to an approved dumping site	75.81	m3	\$	-
	Selected filling			\$	-
3.1.8	200mm Thick hardcore fillings compacted in layers not exceeding 100mm deep and well watered under lobby ground slab and ramps	8.83	m3	\$	-
3.1.9	500mm Thick compacted selected fill to grade natural soil	13.07	m3	\$	-
	Damp proof membrane			\$	-
3.1.10	1000 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps)	55.41	m2	\$	-
	Concrete work in substructure			\$	-
	<u>Plain concrete class 10 (mix 1:3:6)</u>			\$	-
3.1.11	50mm Thick surface blinding under strip foundation and bottom pit	1.30	m3	\$	-
3.1.12	Ditto for columns bases	0.22	m3	\$	-
3.1.13	Ditto for ramps	0.72	m3	\$	-
	<u>Insitu concrete class 25/20, vibrated and reinforced as described, in:-</u>			\$	-
3.1.14	Foundation strip (250mm thick)	2.48	m3	\$	-
3.1.15	Pit foundation beams (200mm thick)	0.91	m3	\$	-
3.1.16	Column Bases (250mm thick)	0.72	m3	\$	-
3.1.17	Columns (substructure)	0.96	m3	\$	-
3.1.18	150mm thick ground floor slab over the pit and 100mm on the walk way	4.95	m3	\$	-
3.1.19	Ground beams (300mm thick by 200mm wide)	2.12	m3	\$	-
3.1.20	Ramp (minimum 100mm thick)	2.88	m3	\$	-
3.1.21	100mm thick bottom pit slab of concrete reinforced with mesh	1.60	m3	\$	-
	Reinforcement for Substructure			\$	-
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>			\$	-
3.1.22	8 mm diameter bars	146.83	kg	\$	-
3.1.23	10 mm diameter bars	421.99	kg	\$	-
3.1.24	12 mm diameter bars	507.51	kg	\$	-
3.1.25	16 mm diameter bars	0.00	kg	\$	-
	<u>Mesh reinforcement : B.S. 4483 Ref A142 weighing 3.22 kgs per square meter including bends, tying wire and spacing blocks</u>			\$	-
3.1.26	Fabric mesh reinforcement for ground floor, ramp and bottom pit slab	33.44	m2	\$	-
	Sawn formwork to:-			\$	-
3.1.27	Horizontal sides of pit foundation beam	10.42	m2	\$	-
3.1.28	Horizontal sides of foundation strip	4.13	m2	\$	-
3.1.29	Horizontal sides of ground beams and floor slabs	29.74	m2	\$	-
3.1.30	Edge of ramps	5.28	m2	\$	-
	Foundation Walling			\$	-

	<u>Solid concrete block walling (mix 1:3:6): bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				\$ -
3.1.31	200mm Thick walling for pit	61.88	m2		\$ -
3.1.32	200mm thick plinth	38.30	m2		\$ -
	Damp proof course				\$ -
3.1.33	1200 gauge polythene or other equal and approved damp proof membrane laid under 150mm thick walls	43.75	m		\$ -
					\$ -

	Plastering and Painting				\$	-
3.1.34	12 mm thick cement : sand (1:3) plaster to walling	92.04	m2		\$	-
	Sundries				\$	-
3.1.35	Allow for making squat hole openings in 150 mm slab	3.00	nr		\$	-
3.1.36	Ditto for making 600 x600 mm openings in 150 mm slab for manhole.	1.00	nr		\$	-
3.2	SUPERSTRUCTURE - 1 Latrine Block, 4 Stances with urinal for boys				\$	-
	Reinforced Concrete					
	<u>In situ concrete class 25/20, vibrated and reinforced as described, in:-</u>					
3.2.1	Ring beam	1.60	m3		\$	-
3.2.2	Columns (superstructure)	0.61	m3		\$	-
	Reinforcement				\$	-
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				\$	-
3.2.3	8 mm diameter bars	110.06	kg		\$	-
3.2.4	12 mm diameter bars	333.02	kg		\$	-
	Formwork				\$	-
	<u>Formwork in sawn finish at any level to:-</u>				\$	-
3.2.5	Sides and soffits of ring beams	27.68	m2		\$	-
3.2.6	Columns	18.63	m2		\$	-
	Walling				\$	-
	<u>Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				\$	-
3.2.7	150mm Thick walls for toilet and curtain	79.67	m2		\$	-
3.3	ROOF AND RAIN WATER DISPOSAL - 1 Latrine Block, 4 with urinal for boys				\$	-
	<u>Contractor to allow for hoisting and all angle brackets or gusset plates, bolts, cleats, fish tailing lugs, drilling holes and the likes for fixing members to position as per the details provided.</u>		Note			
	Roof Construction					
	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing, whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection.(see the drawings)</u>					
3.3.1	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) at 900mm c/c spacing including all the welding, straining, surface preparation and hoisting into position	36.40	m		\$	-
3.3.2	16mm diam anchor bolts L=250 to be welded on steel	12.00	Nr		\$	-
3.3.3	240x150x6mm plate (fillet weld of 6mm thick) welded to the truss and column	12.00	Nr		\$	-
3.3.4	100x60x3mm RHS Rafter including all the welding, straining, surface preparation and hoisting into position	20.90	m		\$	-
	Roof Covering				\$	-
3.3.5	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 capping to tops of bolts	49.92	m2		\$	-
	Rain Water Disposal				\$	-
	<u>Supply and fix rain water system to manufacturer's instructions.</u>				\$	-
3.3.6	250x350 GMS 2mm thick gutter	6.35	m		\$	-
3.3.7	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	2.00	Nr		\$	-
3.3.8	500L Plastic tank including plumbing work (pipe connections and taps)	2.00	lump sum		\$	-
3.3.9	Water tank concrete plinth construction including supply and installation of all materials and labour	2.00	lump sum		\$	-
3.3.10	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum		\$	-
3.3.11	Storm water drainage	29.10	m		\$	-
3.4	DOORS, WINDOWS, FINISHES, PLUMBING - 1 Latrine Block, 4 Stances with urinal for boys				\$	-
	Doors					
	<u>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.</u>					
3.4.1	Door D1 90x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	2.00	Nr		\$	-
3.4.2	Door D2 100x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	2.00	Nr		\$	-

3.4.3	Door D3 100x170cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	2.00	Nr		\$ -
	Louvers				\$ -
3.4.4	600x400mm high windows, RHS steel frame 40x40x2mm painted with 2 coats of antirust paint & one coat of enamel paint with steel louvers	4.00	Nr		\$ -

	Finishes				\$ -
	Floor finishes				\$ -
	<u>In situ cement and sand (1:3) screed</u>				\$ -
3.4.5	50mm thick screed for floor and ramp	38.18	m2		\$ -
	Wall Finishes				\$ -
	<u>Internal and external Walls: 12mm thick cement sand plaster, with steel trowelled finish, as described to:-</u>				\$ -
3.4.6	Internal wall plaster	88.66	m2		\$ -
3.4.7	External wall plaster	57.84	m2		\$ -
3.4.8	Wooden fascia board paint, 1 coat of emulsion under coat & 3 coats of oil based gloss white paint	4.68	m2		\$ -
	Miscellaneous				\$ -
3.4.9	Manhole Cover (supply and form concrete for 600x600x10mm RC cover)	2.00	Nr		\$ -
	Plumbing installations				\$ -
3.4.10	PSN Seat attached with handrails support, casted with concrete and finished with tiles (400mm x 300mm x 400mm).	2.00	Nr		\$ -
3.4.11	Construct a masonry urinal channel 3.7m long with channel width 0.15m having 1.2% slop and install 2 tanks each of 50l drained into the pit. Refer the details on the drawing	1.00	lump sum		\$ -
3.4.12	Supply and install handwash basin and 50l water bucket with its drainage (refer to hand wash details on the drawing)	1.00	lump sum		\$ -
3.4.13	Well finished squat hole with foot rest	2.00	Nr		\$ -
3.4.14	Handrails for length of ramps (on both sides)	2.00	Pairs		\$ -
3.4.15	Vent-pipe	1.00	Item		\$ -
BILL NO. 4	BoQ-Construction of 1 block of latrine with 4 stances with washroom attached for Girls at Hai Bafra PS				\$ -
4	SUBSTRUCTURE - 1 Latrine Block, 4 Stances with washroom attached for Girls				\$ -
	Excavation and Earthwork (Provisional)				
4.1.1	Site clearance and removal of debris from site as directed (10m by 6m)	138.75	m2		\$ -
4.1.2	Excavate loose top soil average 200 deep from ground level and wheel and deposit on site as directed	162.75	m2		\$ -
4.1.3	Manual-Mass excavation for latrine pit not exceeding 1.5m deep starting from Ground level	28.50	m3		\$ -
4.1.4	Ditto exceeding 1.5-4.0m depth starting from stripped level	28.50	m3		\$ -
4.1.5	Excavate in soft material for foundation trenches and column bases not exceeding 1.8m depth starting from stripped level and 60 cm wide	11.10	m3		\$ -
4.1.6	Excavate in soft material for ramp trenches not exceeding 600mm depth	8.64	m3		\$ -
	Disposal of surplus spoils				\$ -
4.1.7	Load and cart away surplus material from site to an approved dumping site	76.74	m3		\$ -
	Selected filling				\$ -
4.1.8	200mm Thick hardcore fillings compacted in layers not exceeding 100mm deep and well watered under lobby ground slab and ramps	9.24	m3		\$ -
4.1.9	500mm Thick compacted selected fill to grade natural soil	14.09	m3		\$ -
	Damp proof membrane				\$ -
4.1.10	1000 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps)	57.87	m2		\$ -
	Concrete work in substructure				\$ -
	<u>Plain concrete class 10 (mix 1:3:6)</u>				\$ -
4.1.11	50mm Thick surface blinding under strip foundation and bottom pit	1.43	m3		\$ -
4.1.12	Ditto for columns bases	0.22	m3		\$ -
4.1.13	Ditto for ramps	0.72	m3		\$ -
	<u>In situ concrete class 25/20, vibrated and reinforced as described, in:-</u>				\$ -
4.1.14	Foundation strip (250mm thick)	2.42	m3		\$ -
4.1.15	Pit foundation beams (200mm thick)	1.03	m3		\$ -
4.1.16	Column Bases (250mm thick)	0.72	m3		\$ -
4.1.17	Columns (substructure)	0.96	m3		\$ -
4.1.18	150mm thick ground floor slab over the pit and 100mm on the walk way	4.41	m3		\$ -
4.1.19	Ground beams (300mm thick by 200mm wide)	2.59	m3		\$ -
4.1.20	Ramp (minimum 100mm thick)	2.88	m3		\$ -
4.1.21	100mm thick bottom pit slab of concrete reinforced with mesh	1.90	m3		\$ -
	Reinforcement for Substructure				\$ -
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				\$ -
4.1.22	8 mm diameter bars	166.62	kg		\$ -
4.1.23	10 mm diameter bars	459.33	kg		\$ -
4.1.24	12 mm diameter bars	563.61	kg		\$ -
	<u>Mesh reinforcement : B.S. 4483 Ref A142 weighing 4.22 kgs per square meter including bends, tying wire and spacing blocks</u>				\$ -
4.1.25	Fabric mesh reinforcement for ground floor, ramp and bottom pit slab	36.74	m2		\$ -
	Sawn formwork to:-				\$ -
4.1.26	Horizontal sides of pit foundation beam	11.82	m2		\$ -
4.1.27	Horizontal sides of foundation strip	4.03	m2		\$ -
4.1.28	Horizontal sides of ground beams and floor slabs	35.71	m2		\$ -

4.1.29	Edge of ramps	5.28	m2		\$ -
	Foundation Walling				\$ -
	<u>Solid concrete block walling (mix 1:3:6): bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				\$ -
4.1.30	200mm Thick walling for pit	75.90	m2		\$ -
4.1.31	200mm thick plinth	37.03	m2		\$ -

	Damp proof course				\$	-
4.1.32	1200 gauge polythene or other equal and approved damp proof membrane laid under 150mm thick walls	51.10	m		\$	-
					\$	-
	Plastering and Painting				\$	-
4.1.33	12 mm thick cement : sand (1:3) plaster to walling	218.96	m2		\$	-
	Sundries				\$	-
4.1.34	Allow for making squat hole openings in 150 mm slab	3.00	nr		\$	-
4.1.35	Ditto for making 600 x600 mm openings in 150 mm slab for manhole.	1.00	nr		\$	-
4.2	SUPERSTRUCTURE - 1 Latrine Block, 4 Stances latrine with washroom attached for Girls				\$	-
	Reinforced Concrete					
	<u>Insitu concrete class 25/20 , vibrated and reinforced as described, in:-</u>					
4.2.1	Ring beam	2.31	m3		\$	-
4.2.2	Columns (superstructure)	0.61	m3		\$	-
	Reinforcement				\$	-
	<u>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</u>				\$	-
4.2.3	8 mm diameter bars	117.97	kg		\$	-
4.2.4	12 mm diameter bars	356.81	kg		\$	-
	Formwork				\$	-
	<u>Formwork in sawn finish at any level to:-</u>				\$	-
4.2.5	Sides and soffits of ring beams	30.66	m2		\$	-
4.2.6	Columns	18.63	m2		\$	-
	Walling				\$	-
	<u>Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm², jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.</u>				\$	-
4.2.7	150mm Thick walls for toilet and curtain	115.24	m2		\$	-
4.3	ROOF AND RAIN WATER DISPOSAL - 1 Latrine Block, 4 Stances latrine with washroom attached for Girls				\$	-
	<u>Contractor to allow for hoisting and all angle brackets or gusset plates, bolts, cleats, fish tailing lugs, drilling holes and the likes for fixing members to position as per the details provided.</u>		Note			
	Roof Construction					
	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing, whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection.(see the drawings)</u>					
4.3.1	100 x 50 x 2mm thick Z-purlins securely fixed onto the steel trusses (MS) at 900mm c/c spacing including all the welding, straining, surface preparation and hoisting into position	41.80	m		\$	-
4.3.2	16mm diam anchor bolts L=250 to be welded on steel	12.00	Nr		\$	-
4.3.3	240x150x6mm plate (fillet weld of 6mm thick) welded to the truss and column	12.00	Nr		\$	-
4.3.4	100x60x3mm RHS Rafter including all the welding, straining, surface preparation and hoisting into position	20.90	m		\$	-
	Roof Covering				\$	-
4.3.5	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	57.32	m2		\$	-
	Rain Water Disposal				\$	-
	<u>Supply and fix rain water system to manufacturer's instructions.</u>				\$	-
4.3.6	250x350 GMS 2mm thick gutter	20.90	m		\$	-
4.3.7	Rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	2.00	Nr		\$	-
4.3.8	1000L Plastic tank including plumbing work (pipe connections and taps)	1.00	lump sum		\$	-
4.3.9	Water tank concrete plinth construction including supply and installation of all materials and labour	1.00	lump sum		\$	-
4.3.10	Soak pit construction including supply and installation of all materials and labour	1.00	lump sum		\$	-
4.3.11	Storm water drainage	25.50	m		\$	-
4.5	DOORS, WINDOWS, FINISHES, PLUMBING - 1 Latrine Block, 4 Stances latrine with washroom attached for Girls				\$	-
	Doors					
	<u>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.</u>					
4.5.1	Door D1 90x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	3.00	Nr		\$	-

4.5.2	Door D2 100x237cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr		\$ -
4.5.3	Door D3 100x170cm - RHS steel frame 40mm x 40 mm x 2mm painted with 2 coat of antirust paint and 1 coat of enamel paint with door leaf 180D opening made of 0.5mm flat metal pane with burglar proofing (RHS 25x25x2mm vertical steel bars at equal intervals welded to frame on the interior side. Louvers is 0.5mm thick welded at to frame.	1.00	Nr		\$ -
	Louvers				\$ -
4.5.4	600x400mm high windows, RHS steel frame 40x40x2mm painted with 2 coats of antirust paint & one coat of enamel paint with steel louvers	4.00	Nr		\$ -
	Finishes				\$ -
	Floor finishes				\$ -
	<i>In situ cement and sand (1:3) screed</i>				\$ -
4.5.5	50mm thick screed for floor and ramp	44.33	m2		\$ -
	Wall Finishes				\$ -
	<i>Internal and external Walls: 12mm thick cement sand plaster, with steel trowelled finish, as described to:-</i>				\$ -
4.5.6	Internal wall plaster	107.77	m2		\$ -
4.5.7	External wall plaster	64.86	m2		\$ -
4.5.8	Wooden fascia board paint, 1 coat of emulsion under coat & 3 coats of oil based gloss white paint	31.35	m2		\$ -
	Miscellaneous				\$ -
4.5.9	Manhole Cover (supply and form concrete for 600x600x10mm RC cover)	1.00	Nr		\$ -
	Plumbing installations				\$ -
4.5.10	PSN Seat attached with handrails support, casted with concrete and finished with tiles (400mm x 300mm x 400mm).	1.00	Nr		\$ -
4.5.11	Construct a masonry urinal channel 4.7m long with channel width 0.15m having 1.2% slop and install 2 tanks each of 50l drained into the pit. Refer the details on the drawing	1.00	lump sum		\$ -
4.5.12	Supply and install handwash basin and 50l water bucket with its drainage (refer to hand wash details on the drawing)	1.00	lump sum		\$ -
4.5.13	Well finished squat hole with foot rest	3.00	Nr		\$ -
4.5.14	Handrails for length of ramps (on both sides	2.00	Pairs		\$ -
4.5.15	Vent-pipe	1.00	Item		\$ -
BILL NO. 5	BoQ-CONSTRUCTION OF PRIMARY HEALTH CARE UNIT AT HAI DINKA				\$ -
5.1	SITE PREPARATION & SUBSTRUCTURE				\$ -
	Excavation and Earthwork (Provisional)				
5.1.1	Site clearance and removal of debris from site as directed by the Engineer	165.36	m2		\$ -
5.1.2	Excavate loose top soil average 150mm deep from ground level, wheel and deposit away from site as directed	120.36	m2		\$ -
5.1.3	Excavate 800mm wide in soft material for strip foundation trenches not exceeding 1,500mm deep starting from stripped level	70.74	m3		\$ -
	Backfilling				
5.1.4	Return, fill and ram selected excavated material around foundations	27.69	m3		\$ -
	Disposal of Surplus excavated materials				
5.1.5	Load and cart away surplus material from site to an approved dumping site	21.39	m3		\$ -
	Selected filling				
5.1.6	400mm thick hardcore fillings compacted in layers with top surfaces well levelled	65.57	m2		\$ -
5.1.7	50mm thick sand blinding to surfaces of hardcore (Measured Separately)	3.43	m3		\$ -
	Damp proof membrane				
5.1.8	1000 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps). Cost to include anti termite treatment.	80.36	m2		\$ -
	Anti-termite Treatment				
5.1.9	Anti - termite treatment to building area, other excavated trenches and pits with "Aldrex 48" or other equal approved anti-termite solution in accordance with manufacturer's instructions and as directed by the IOM Engineer.	100.07	m2		\$ -
	Concrete work in substructure				
	Mass plain concrete class 15 (mix 1:3:6)				
5.1.10	50mm Thick surface blinding under strip foundation	2.36	m3		\$ -
	In situ concrete class 25, vibrated and reinforced as described, in:-				
	Foundation strip, column footing and ground beam	15.50	m3		\$ -
5.1.11	100mm thick ground floor slab, grade 20 RCC	8.00	m3		\$ -
	Reinforcement				
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks as described to;				
5.1.12	12mm bars to column footing, starter columns and ground beam	542.92	kg		\$ -
5.1.13	8mm mild steel bars links to starter columns and ground beam	155.33	kg		\$ -

	Mesh reinforcement ; B.S. 4483 Ref A98 cost shall include; bends, tying wire and spacing blocks				
5.1.14	Fabric mesh reinforcement to ground floor and ramp	87.56	m2		\$ -
	Sawn formwork to:-				
	Vertical sides of column foundation and starter columns	64.80	m2		\$ -
	Edges of ground slab 75-150mm girth and ramps	36.00	m		\$ -
	Foundation Plinth Wall				
	Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm ² , jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.				
5.1.15	200mm Thick walling	135.72	m2		\$ -
	Plinths				
5.1.16	12 mm thick cement : sand (1:3) plaster to plinth	147.24	m2		\$ -
5.1.17	Three coats of bituminous paint to plinth surfaces.	147.24	m2		\$ -
5.1.18	Damp proof courses: hessian based bituminous felt: bedded in cement and sand (1:4) mortar: 300mm laps.	55.95	m		\$ -

	Splash Apron				
5.1.19	Excavate strip foundation for apron depth n.e 900mm, 450mm wide	11.12	m3		\$ -
5.1.20	Return, fill and ram selected excavated material around foundations	5.70	m3		\$ -
5.1.21	Remove surplus excavated materials from site as dispose as may be directed	1.85	m3		\$ -
5.1.22	100mm thick foundation concrete to bottom of excavation-1:3:6	2.01	m3		\$ -
5.1.23	200mm thick c/s block wall bedded in 1:4 motar mix with hoop iron at every alternate course	20.60	m2		\$ -
5.1.24	150mm filling in imported materials, well watered and compacted	1.67	m3		\$ -
5.1.25	75mm thick grade 20 reinforced concrete in A98 BRC mesh on apron topping	20.07	m2		\$ -
5.1.26	20mm thick c/s screed on apron topping finished in steel float, mix 1:3	20.07	m2		\$ -
5.1.27	Sawn form work to sides of oversite apron concrete topping	5.92	m2		\$ -
BILL NO. 5.2	STRUCTURAL FRAME				\$ -
	Reinforced Concrete				
	Insitu concrete class 25, vibrated and reinforced as described, in:-				
5.2.1	Ring beams	3.14	m3		\$ -
5.2.2	Columns	1.30	m3		\$ -
	Reinforcement				
	High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks				
5.2.3	8 mm diameter bars in columns and ring beam - stirrups	182.64	kg		\$ -
5.2.4	12 mm diameter bars in columns and ring beam	359.70	kg		\$ -
	Formwork				
	Formwork in sawn finish at any level to:-				
5.2.5	Sides and soffits of ring beams	24.86	m2		\$ -
5.2.6	Sides of columns	32.40	m2		\$ -
	WALLING				\$ -
	External Walling				
	Solid concrete block walling (mix 1:3:6); bedded, load bearing 7N/mm ² , jointed and pointed in cement sand (1:3) mortar; reinforced with hoop iron after every alternate course.				
5.2.7	200mm Thick walls	140.88	m2		\$ -
5.2.8	150mm Thick walls	15.53	m2		\$ -
	Sundries				
5.2.9	Allow for making 50mm openings in 200 mm thick wall	4.00	nr		\$ -
BILL NO. 5.3	ROOF AND RAIN WATER DISPOSAL(contractor to cost for steel or timber roof members but not both)				\$ -
	Roof Construction(Steel Members)				
	<u>Structural steelwork grade 4.3C (factory primed) to be executed by an approved sub-contractor.</u>				
	<u>Unframed mild steel including hoisting and fixing in position and including drilling holes, all necessary welding, bolts plates/gusset plates and other jointing whether or not specifically described herein or shown on the drawing and with one coat of red oxide primer after erection.(see the drawings)</u>				
5.3.1	50 x 50 x 3mm Bottom chord, welded to the top of column	41.00	m		\$ -
5.3.2	50 x 50 x 3mm Top chord welded with 6mm fillet welds to 40 x 40 x 3mm RHS internals (RHS internals measured separately)	45.00	m		\$ -
5.3.3	50 x 50 x 3mm RHS internals welded with 6mm fillet welds to 50 x 50 x 3mm Bottom/top chords (Bottom and Top chords measured separately)	10.00	m		\$ -
5.3.4	40x40x3mm RHS section bracings welded to trusses at each intersection; including necessary drilling holes welding/bolts and washers	37.00	m		\$ -
5.3.5	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.	127.16	m		\$ -
5.3.6	16mm diam anchor bolts L=250 to be welded on steel reinforcement	12.00	nr		\$ -
5.3.7	150x150x8mm plate (fillet weld of 6mm thick) welded to the truss and column	12.00	nr		\$ -
	Roof Covering				\$ -
5.3.8	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	115.66	m2		\$ -
5.3.9	Supplying & fixing Gauge 28 prepainted ridge cap; 650mm girth (average) in position complete with all necessary roofing screws or hooks as required.	11.66	m		\$ -
5.3.10	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. Painted with 1 coat of emulsion under coat and finished with 3 coats of an oil-based gloss paint in white	10.00	m2		\$ -
	Rain Water Disposal				
	Supply and fix rain water system to manufacturer's instructions.				

5.3.11	250 x 350 x 2mm galvanised metal sheet gutter welded on 40 x 25 x 2mm RHS; gutter sitting on 20 x 6mm thick metallic support bracket placed at 2000mm c/c	21.40	m		\$ -
5.3.12	Extra over for shoe.	16.00	Nr		\$ -
5.3.13	Ditto for rainwater outlets with nozzle for 80mm rainwater down pipe outlet.	2.00	Nr		\$ -
	Ceiling				
5.3.14	Construct a plastered ceiling using timbers of sizes 100x50mm attached to metallic roof struss by where necessary drilling and bolting the timber members to steel to ensure the suspended members are firmly holdup to its positions bofere plastering as aproved quality by IOM engineer, cost includes ceiling joists, branders, vertical and horizontal supports, metal lathe, connections etc. c/s mix 1:4	94.17	m2		\$ -

BILL NO. 5.4	DOORS AND WINDOWS				\$	-
	DOORS					
	Note: All doors to be supplied and fixed s per the details and schedule provided. All iron Mongery that has not been measured separately shall be priced together with the corresponding door.					
	Steel Plated Doors					
5.4.1	Mild steel plated single leaf door made out of cold rolled steel sections in 40x40x2mm SHS frame material, 25x25x2mm vertical SHS burglar welded internally, 0.5mm thick flat metal plate for shutter and 0.5mm thick louvers; thoroughly cleaned and phosphatized to resist corrosion before receiving 2 undercoats of anti-rust primer and one finishing coats of enamel paint on metal surfaces (D1 - Size: 1000x2700mm overall)	5.00	Nr		\$	-
5.4.2	Two leaf door made out of 0.5mm thick mild steel plate welded to 40x40x2mm SHS bars frames; fixed to 40x40x2mm thick mild steel SHS external frame; stainless steel parliament hinges, door lock with pull - push bar handle. All metals surfaces thoroughly cleaned and phosphatized to resist corrosion before receiving 2 undercoats of anti-rust primer and one finishing coats of enamel paint on metal surfaces (D2 - Size: 1200x900mm overall)	1.00	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:-					
5.4.3	Surfaces steel plated doors and steel frames	10.45	m2		\$	-
	WINDOWS					
	Steel - Glazed windows					
	<u>Steel casement windows in 40x40x2mm RHS frames with and including burglars in 25x25x2mm vertical steel bars at equal interval welded to frames on the interior side, 0.5mm thick louvers fixed over with mosquito wire netting, thoroughly cleaned and phosphatized to resist corrosion before receiving 2 undercoats of anti-rust inhibiting primer and one finishing coats enamel paint to all metal surface. Cost includes window stays and fastners.</u>					
5.4.4	W1. 1500x1700mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glazed 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	3.00	Nr		\$	-
5.4.5	W2. 600x900mm door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glazed with 5mm thick clear glass. Ironmongry stainless steel pull-push bar handle	1.00	nr		\$	-
5.4.6	W3. 600x1500mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glazed with 5mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars wended 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	2.00	Nr		\$	-
5.4.7	W4. 1200x1700mm. door Frame material is LTZ steel frame 40mm x 40mm x 2mm, Painted with 2 coats of antirust paint & one coat of enamel paint glazed with 5mm thick clear glass. Bugler proofing is RHS 25 X 25 X 2 mm steel bars wended 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	3.00	nr		\$	-
5.4.8	5mm thick clear glass fixed to windows with glass silcon and putty	10.12	Nr		\$	-
5.4.9	75mm pre cast concrete cill to all windows	11.00	m		\$	-
5.5	FINISHES				\$	-
	Floor finishes					
	Insitu cement and sand (1:3) screed					
5.5.1	50mm thick screed finish on floor in steel float	65.33	m2		\$	-
	Wall Finishes					
	Internal Walls: 12mm thick cement sand plaster, with steel trowelled finish, as described to:-					
5.5.2	Internal Sides of solid block/brick surfaces	169.62	m2		\$	-
5.5.3	To plastered wall surfaces	169.62	m2		\$	-
	External Walls: 12mm Cement and sand (1:3) render on stone or concrete work to:-					
5.5.4	Concrete or block work	135.07	m2		\$	-
	Prepare and apply two undercoats of soft white/cream permaplast weather proof paint which is offering protection against severe tropical weather and 15mm thick wall master textured paint finish as ruff & tuff to:-					
5.5.5	External wall surfaces	135.07	m2		\$	-

	Ceiling finishes				
5.5.6	Apply 15mm thick c/s plaster of mix 1:3 to ceiling soffit	94.00	m2		\$ -
5.5.7	Prepare and apply one undercoat and 2 finishing coats of matt paint to protect ceiling soffit	94.00	m2		\$ -

5.6	ELECTRICAL INSTALLATION	1.00			\$	-
	Conduit work					
	<u>Supply and installation of upvc electrical conduits for passage of wires in walls and ceiling, rates inclusive of wall chesiling</u>					
5.5.1	25mm conduits	86.00	m		\$	-
5.5.2	Extra over to corners (bents 25mm)	15.00	Nr		\$	-
5.5.3	Couplers 25mm	10.00	Nr		\$	-
5.5.4	Circular boxes 25mm	18.00	Nr		\$	-
5.5.5	Metallic MK boxes (Double)	9.00	Nr		\$	-
5.5.6	Metallic MK boxes (Single)	5.00	Nr		\$	-
5.5.7	Supply and installation of main switch 4-way (MCB) 16A	1.00	Nr		\$	-
	Wiring work					
	<u>Supply and installation of insulated twin cables in conduits, twin cable.</u>					
5.5.8	Load cable, 16mm2 (single)	18.00	m		\$	-
5.5.9	Power cable 2.5mm2	100.00	m		\$	-
5.5.10	Light cables 1.5mm2	150.00	m		\$	-
	FIXTURES				\$	-
	Bench Seats					
5.5.12	450 x 500 x 2,900mm bench seat made of precast concrete with bench of 100mm thick and 2 legs, masonry base wall 350mm x 500mm x 350mm high all according to detail drawing. Bench shall be smooth finish.	8.00	Nr		\$	-
BILL NO. 6	BOQ - CONSTRUCTION OF PERIMETER WALL FENCE - 100 m x 100 m AT				\$	-
	Perimeter wall design as shown on Drawings. Final layout & orientation of gates to be determined on site.		Note			
6.1	SUBSTRUCTURE				\$	-
	Excavation					-
6.1.1	Site clearance and removal of debris from site as directed, 2m wide from the centerline of the fence on both side.	1,312.00	m2			-
6.1.2	Excavate strip foundation trenches not exceeding 0.8m wide by 1.2m deep starting from stripped level.	117.79	m3			-
6.1.3	Ditto: Column C1 bases 1200mm x1200mmx 1500mm	5.18	m3			-
6.1.4	Ditto: Column C2 bases 800mm x800mmx 1500mm	7.68	m3			-
	Backfilling					-
6.1.5	Return, fill in and ram selected excavated material around foundations	45.81	m3			-
	Disposal of Surplus spoils					-
6.1.6	Load and cart away surplus material from site to an approved dumping site	71.98	m3			-
	Crushed stone fill					-
6.1.7	400mm thick hardcore (crushed stone) built to height of 150mm above GL with mortar of mix 1:3 with provision of 3" weep holes installed with 3" pvc pipe.	44.99	m3			-
	Damp Proofing					-
6.1.8	1000 gauge polythene sheet damp proof membrane: to plinth level: laid on blinded smooth finished hardcore bed with 300mm side and end laps to receive brick wall	73.62	m2			-
	Concrete work in substructure					-
	<u>Plain concrete class 15 (mix 1:3:6)</u>					-
6.1.9	50mm Thick surface blinding under strip foundations	9.82	m3			-
6.1.10	Ditto: Under strip footing	0.79	m3			-
	<u>In Situ concrete class 25, vibrated and reinforced as described, in:-</u>					-
	Strip foundation	39.26	m3			-
6.1.11	Column bases	6.53	m3			-
6.1.12	Columns in foundations (six of size 400mmx400mm) and (twenty four of size 200mmx200mm)	1.32	m3			-
6.1.13	Ground beam (200x200 thick)mm	13.09	m3			-
	Reinforcement					-
	<i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i>					-
6.1.14	8mm diameter bars	805.50	kg			-
6.1.15	12mm diameter bars	1,765.72	kg			-
	Sawn formwork to:-					-
6.1.16	Vertical sides of column bases	49.14	m2			-
6.1.17	Vertical sides of columns	53.13	m2			-
6.1.18	Edges of 200mm high ground beam & ramp	229.08	m2			-
	Foundation walling					-
6.1.18	Solid block walling 200mm thick with minimum comprehensive strength of 6.0N/mm2;bedded and jointed in cement sand (1:3) mortar	376.28	M2			-
	Plinths					-
6.1.19	12 mm thick cement : sand (1:3) plaster to plinth	376.28	m2			-
6.1.20	Prepare and apply one priming coat and two coats of black bitumastick paint on rendered plinths	376.28	m2			-
6.2	STRUCTURAL FRAME				\$	-
	Concrete work in superstructure					
6.6.1	Column (400mmx400mm) for corners and gate;	2.30	m3			-
6.6.2	Ditto (200mmx200mm)	1.60	m3			-
	Reinforcement					-

	<i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i>				-
6.6.3	8mm diameter bars	180.50	kg		-
6.6.4	12mm diameter bars	283.26	kg		-
	Sawn formwork to:-				-
6.6.5	Vertical sides of columns	70.84	m2		-

.	Walling				
6.6.6	Three- ply bituminous felt damp proof course bedded in cement and sand (1:4) mortar (measured nett allow for 300mm laps):- 200mm wide	327.20	m		-
6.6.7	200mm thick walls, including provisions for supply and installation of weep holes with 3" PVC pipe at 10 m intervals as required based on the ground slope	644.30	m2		-
6.3	GATES & DOORS & RAZOR WIRE INSTALLATION				\$
	<u>Note: All gates and 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 item</u>				
6.3.1	Double leaf shutter Steel sliding main gate with inbuilt pedestrian gate (900mm x2000mm) to fit structural opening size 4000mm x 2300mm high: RHS steel shutter frame 100mm x 50mm x 4mm, attached to concrete column with 75mm roller/bearing Painted with 2 coats of antirust paint & one coat of blue enamel paint. Each gate leaf shall have 3 inch dia rollers welded onto gate shutters@ 1.m C/C, rolling on plain Y10 welded on cast angle bar 75x75x3mm	1.00	Nr		-
6.3.2	Single leaf access for pedestrian to the western side to fit structural opening of 900mm by 2000mm high: RHS steel frame 100mmx50mmx2mm attached to concrete column with heavy duty hinges, painted with 2 coats of antirust paint and one coat of blue enamel paint.	1.00	Nr		-
6.3.3	Construct access ramsp for both pedestrian access and main gate at a slope of 5% on both sides of the perimeter wall, as shall be directed by the site Engineer; In Situ concrete class 20, vibrated with a minimum concrete thickness 100mm-200mm at all points with reinforced Mesh; B.S. 4483 weighing 6.22 kgs per square meter including bends, tying wire and spacing blocks.	3.60	m3		-
6.3.4	Install 300mm long metal spikes on the top horizontal bar of each gate leaf (main and access gate) at interval 1.5m. The spikes to form V-shape which shall be used to support installation of razor wire (400mmØ). painted with 2 coats of antirust paint and one coat of blue enamel paint.	1.00	Lump Sum		-
6.3.5	Install one Y-shaped 50x50x3mm iron angle bars with 300mm lower part of Y embedded into the top of brick fence wall and concreted. The V-shape part of the Y to extend 300mm either way each 300mm apart and to have 2 holes drilled on each side to receive 400mm razor wire. The Y-shaped bars to be installed at 2m intervals all round the 340m long brick fence wall, painted with 2 coats of antirust paint and one coat of blue enamel paint.	219.13	Nr		-

6.4	FINISHES				\$	-
	Walls					
6.4.1	Top of Walls finishes Cement and sand (1:3) - 15mm thick wall plaster and 150mm wide coping on either sides.	86.46	m2			-
6.4.2	Paint: 1 coat of emulsion under coat on top of walls, finish with 3 coats of emulsion weather guard paint in smoked grey;	86.46	m2			-
6.4.3	Internal Wall finishes Cement and sand (1:3) - 15mm thick wall plaster and 150mm wide coping on either sides.	785.28	m2			-
6.4.4	Paint: 1 coat of emulsion under coat on interior walls, finish with 3 coats of emulsion weather guard paint in smoked grey;	785.28	m2			-
6.4.5	For exterior walls, apply rough cast slurry (black oxide), 9mm thick, as shall be directed by the site Engineer	785.28	m2			-
	BILL SUMMARY					
BILL NO. 6	BOQ - CONSTRUCTION OF PERIMETER WALL FENCE - 100 m x 100 m AT HAI BAFRA P/S	1.00	unit	\$	-	\$ -
					GRAND TOTAL	\$ -
Project Description: Expansion of Hai Dinka PHCU, 1 block of 3 stance latrine with washroom, Wall Fence extension; & Construction of						Tender No.07
	BILL SUMMARY					
BILL NO. 1	PRELIMINARIES	1.00	UNIT	\$	-	\$ -
BILL NO. 2	BoQ 3-STANCE LATRINE AND WASHROOM ATTACHED AT HAI DINKA PHCU NORMAL SOIL	1.00	UNIT	\$	-	\$ -
BILL NO. 3	BoQ-Construction of 1 block of latrine with 4 stances with urinal for boys at Hai Bafra PS	1.00	UNIT	\$	-	\$ -
BILL NO. 4	BoQ-Construction of 1 block of latrine with 4 stances with washroom attached for Girls at Hai Bafra PS	1.00	UNIT	\$	-	\$ -
BILL NO. 5	BoQ-CONSTRUCTION OF PRIMARY HEALTH CARE UNIT AT HAI DINKA	1.00	UNIT	\$	-	\$ -
BILL NO. 6	BOQ - CONSTRUCTION OF PERIMETER WALL FENCE - 100 m x 100 m AT HAI BAFRA P/S	1.00	UNIT	\$	-	\$ -
			GRAND TOTAL			\$ -