

G. BILL OF QUANTITY FOR CONSTRUCTION OF GENERATOR HOUSE AT INZONE EDUCATIONAL CENTER

Notes: The contractor is reminded to visit the sites before filling the tender to ascertain the extent of the conditions of site. He is also encouraged to carefully look at the drawings, elements descriptions and the technical specifications that are attached to this bill of quantities to be aware of scope of works and the quality work that is required. All quantified works in the tender are provisional and payment shall be made based on the actual work executed at the site and agreed upon by all parties. The contractor is advised to constantly seek the UNHCR Engineer instructions at each phase of the work and if required, before filling the tender. All unit rate shall be deemed to include all elements of supplying and construction work that is labour and other overheads eg security, profit and overheads, cost of materials, wastages, transport etc.

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (KSH)	AMOUNT (KSH)
New generator house					
1.0	ELEMENT.1 SUBSTRUCTURE				
	Excavations				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, pumping or otherwise				
1.1	Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil as instructed by Engineer	sq.m	9.0		-
1.2	Excavate to reduce levels not exceeding 1.50m deep average depth 300mm	cum	3.0		-
1.3	Excavate for foundation strip commencing at reduced levels depth not exceeding 1.5m deep	cum	11.0		-
	Filling and carting away				
1.4	Return, fill and ram with selected and approved excavated material around excavations	cum	8.0		-
1.5	Supply and hand pack a 300 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers using a plate compactor to receive murrum as directed on site by Engineer	sq.m	9.0		-
1.6	Supply and lay 50mm thick murrum blinding on top of the well compacted hardcore surfaces and under foundations	sq.m	9.0		-
1.7	Apply approved anti-termite and herbicide treatment chemicals (Termidor or Gladiator) with a ten year guarantee to top of hardcore beds and over foundation walls	sq.m	9.0		-
1.8	Supply and lay 1000 gauge polythene DPM (with 150mm laps) over the murrum blinding	sq.m	9.0		-
	Vibrated reinforced concrete grade 20/20 (1:2:4) in:				
1.12	150mm thick ground slab with surface steel trowelled smooth	cm	1.4		-
1.13	600x200mm strip foundation	cum	1.1		-
1.14	150mm thick sloping ramp in the door entrance	cum	0.5		-
1.15	300 mm thick generator plinth	cum	1.0		-
1.16	200mm high natural quarry stone in foundation walling and reinforced in alternative courses with hoop iron	sq.m	14.0		-
	Sawn formwork to:				
1.17	Formwork to edges of floor slab girth over 75mm but not exceeding 150mm	lm	12.0		-
1.18	Formwork to sides of generator plinth girth over 75mm but not exceeding 150mm	lm	8.0		-
	Steel reinforcement as described including cutting to length, bending and fixing including all necessary tying wires and spacing blocks (all provisional)				
1.19	10mm and 8mm diameter high tensile reinforcement bars to B.S. 4461	kg	35.0		-
1.20	Steel fabric mesh reinforcement to B.S. 4483 (measured net)				
1.21	Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150 mm side allowance including apron	sq.m	9.0		-
1.22	Mesh fabric reinforcement ref. No. A393 laid in generator plinth with minimum 150 mm side allowance	sq.m	2.5		-
1.23	Plinths				
1.24	12mm thick cement and sand (1:3) render to 400mm high plinths	sq.m	3.6		-
1.25	Prepare and apply three coats black bituminous paint to rendered plinths	sq.m	3.6		-
	TOTAL ELEMENT No. 1 (Substructure)				-
	ELEMENT NO. 2: SUPERSTRUCTURE				
	Walling				
	Dpc				
2.1	150 mm wide approved quality 3-ply bituminous felt damp proof course under walls	lm	28.0		-
	Walls				
2.2	150mm thick dressed natural Turkana load bearing red quarry stone (1.5m high) bonded with 1:3 cement sand mortar and reinforced at alternative courses with hoop iron including gamble end and rake cutting to gamble end	sq.m	13.5		-
	100x4mm CHS Steel Columns				
2.3	supply, fabricate and install CHS columns as per the design.(All set to work as per the design)	no	9.0		-
	A142 BRC MESH for the walls				
2.4	supply and fix A142 BRC MESH above the masonry walling complete with timber biddings to for the edges.	sq.m	13.0		-
	TOTAL ELEMENT No. 2 (Superstructure)				-

	ELEMENT NO. 3: ROOFING				-
3.1	Gauge 28 IT5 roofing sheets	sq.m	15.0		-
3.2	Ditto matching ridge cap overall width 350mm	lm	15.0		-
	In sawn celcured prime grade cypress (treated)				-
3.4	100 x 50mm rafters and tie beam	lm	25.0		-
3.5	100 x 50mm kingposts	lm	5.0		-
3.6	100 x 50mm struts, ties and collars	lm	50.0		-
3.7	75 x 50mm purlins	lm	30.0		-
	Fascia Board				-
3.8	Painted 225 x 25 mm thick wrot cypress fascia/ barge boards fixed to end of rafters (m/s)	lm	22.0		-
	Painting				-
	TOTAL ELEMENT No. 3 (Roofing)				-
					-
	ELEMENT NO.4: DOORS				-
	Steel door				-
4.1	Supply and fix 2000x2100mm Purpose-made steel double door, manufactured from standard 25x25x3mm square tubes sections, complete with pressed steel horizontal 50x50x3mm frame and complete with all the necessary ironmongery to engineers satisfaction	no	1.0		-
4.2	Touch up primer, prepare and apply three coats orange gloss oil paint to doors and including frames internally and externally	sq.m	10.0		-
	TOTAL ELEMENT No. 4 (Doors)				-
					-
	ELEMENT NO. 5: FINISHES				-
	Externals finishes				-
	Walls				-
5.1	Extra over walling for smooth chisel dressing with flush pointed recessed horizontal joints (Keying)	sq.m	13.5		-
	Prepare and apply three coats of first grade soft white vinyl silk emulsion paint as per "Crown Berger" approved to:				-
5.2	Rendered surfaces of beams and selected masonry walls	sq.m	13.5		-
	Internal finishes				-
	Floors				-
	Bedding screed; cement and sand (1:3) screed				-
	24mm Thick; 1 no. coated; steel trowelled smooth; to concrete base (m/s); generally to				-
5.3	30mm thick steel trowelled screed	sq.m	10.0		-
5.4	100 x 25mm thick skirting to junction with floor and wall finish	sq.m	6.0		-
	Walls Plaster				-
5.5	12mm thick, 2 no. coatwork plaster (1:2:6) to concrete or masonry base (m.s.) generally, walls internal steel trowelled	sq.m	13.5		-
	Prepare and apply three coats of first grade soft white cream vinly silk emulsion paint as per "Crown Berger" approved to:				-
5.6	Plastered walls	sq.m	13.5		-
	TOTAL ELEMENT No. 5 (Finishes)				-
	Total for generator house				-