

## Bill of Quantity for Two Classrooms and one office construction

Description				
1 EXCAVATIONS AND EARTH WORK	Unit	Qty	Unit Cost	Total Cost
<ul> <li>Excavate for Strip foundation 60x80cm including dressing the sides &amp; levelling the bed of the foundation to the required width &amp; required depth , (the depth should be measured from the lowest point of the construction site), for classrooms as per drawings &amp; specifications, dug soil and debris to be discharged and removed away from the site to the area determined by the local authorities.</li> <li>1.1</li> </ul>	ML	65		
Provide and lay granular fill of approved type for compaction purposes free from debris and organic materials, to be applied in layers not exceeding 20cm thick each and flattered, Total thickness 20cm , well watered and compacted mechanically as specified for as per drawings & 1.2 specifications.	M <sup>3</sup>	6.24	& earth movement	
2 CONCRETE WORK	Unit	Qty	Unit Cost	Total Cost
Provide, cast & lay plain concrete mix (1:3:6) cement: sand: gravel C15 , 10 cm layer thickness for floors as per specifications & drawings, water curing to be applied for 2.1 7days (seven) minimum,	M <sup>3</sup>	11.25		
Provide and cast reinforcement concrete grade beams (1 : 2 : 4) C/S/G C25 mix in 35 cm width x30 cm height , reinforced with 6 steel bars ø16 mm (3 @ top & 3 @ bottom ) 15cm c/c using steel stirrups of steel bars ø8 20cm c/c , steel bars bending at ends should be done with 15 cm leg , steel cover should be 2 - 2.5 cm , mechanical mixing and vibrator to be strictly applied for casting , curing for minimum 7 consequent days using straw sacks covering and watering three times per day, no construction work over the grade beam is allowed before the curing duration is completed perfectly. The price should include all materials tools workmanship , shuttering ,etc to complete the job as per specifications and drawings and engineer acceptance	ML	65		
2.2 Provide and cast reinforcement concrete Tie beams (1 : 2 : 4) C/S/G C25 mix in 35 cm width x22 cm height , reinforced with 6 steel bars ø12 mm (3 @ top & 3 @ bottom ) 15cm c/c using steel stirrups ø8 20cm c/c , steel bars bending at ends should be done with 15 cm leg , steel cover should be 2 - 2.5 cm , mechanical mixing vibrator to be strictly applied for casting , curing for minimum 7 consequent days using straw sacks covering and watering three times per day, no construction work over the beam is allowed before the curing duration is completed perfectly. The price should include all materials tools workmanship , shuttering ,etc to complete the job as per specifications and drawings and engineer acceptance	ML	65		
2.3		Summary	of concrete work	
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3	BRICK WORK	Unit	Qty	Unit Cost	Total Cost
	Provide and build stone walls with spec.60cm width , 80cm	ML	65		
	minimum of granite stone wall in 1:6 c/s cement sand mortar,				
	stone material should be from well degraded aggregates with				
	different sizes, underground up to ground level as per				
3.1	specifications & drawings.				
	Provide and build brick wall of <u>two</u> bricks width grade wall in	M <sup>2</sup>	13		
	1:6 c/s cement /sand mortar (gassa)under grade beam level,				
	20cm height, .The top of the wall should be truly levelled with				
	cement /sand with rendering as per specifications & drawings				
3.2					
	Provide and build wall of 1½ (one and half) of brick wall in	M <sup>2</sup>	260		
	cement sand mortar(1:8) for walls, the walls should be totally				
	vertical using for that level ruler and Plumb bob, as per				
	specifications & drawings.				
3.3					
	Provide and build one brick wall in 1:6 c/s cement sand	M <sup>2</sup>	13.00		
	mortar for parapet, the walls should be totally vertical using				
	for that level ruler and Plumb bob, as per specifications &				
3.4	drawings.				
				mary of Brick work	
4	ROOF WORK	Unit	Qty	Unit Cost	Total Cost
	Manufacture, supply and install trusses 6m length. The steel	No	13		
	truss frame consist of steel pipes 4cmx8cm x 1.4mm . truss				
	spacing 2.25m c/c. fixed to the walls with concrete blocks and				
	positioned on concrete pillows, coated with two layers of				
	antirust and painted with two layers of oil paint, for the roof				
	of classrooms and office as per drawings & specifications.				
4.1					
	Provide & fix steel purlin from rectangular steel pipe 3x6cm x	ML	225		
	1.4 mm each 70cm c/c minimum, coated with two layers of				
	antirust and painted with two layers of oil paint, for roofs, as				
	per specifications and drawing				
4.2					
	Supply and install Galvanized iron corrugated sheets 20 feet	M <sup>2</sup>	135		
	length of thickness 0.35 mm 100 cm breadth. to be fixed to		133		
	the roof purlins using self drilled screw bolt with bonded				
	rubber washer, overlapping of sheets should not be less than				
	two corrugated pitched.				
4.3	two conteguted piteried.				
4.3		I	Sum	 mary of Roof work	
5	FINISHING WORK	Unit	Qty	Unit Cost	Total Cost
	Provide and apply plaster external and internal of cement	M <sup>2</sup>	550		
	/sand mortar with clean and fine sand 1:6 (3 coats: render,				
	setting & floating coat to give a total thickness of 2cm) for				
	walls as per specifications & drawings				
5.1					
	Supply & apply external and internal painting, 3 coats of	M <sup>2</sup>	520		
	emulsion paint of approved brand and manufacturer,				
	including priming coat to give an even shade, thoroughly				
	brushing the surface free from mortar. Colour should be				
	determined by the site engineer				
5.2					
	Summary of finishing work				
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6	Electrical Work and equipment	Unit	Qty	Unit Cost	Total Cost	
	Provision and fixing of ceiling fan size 56" ( from best quality )	No	7			
	including the wiring, electrical conduits, fixing elements, etc.					
6.1	, _ , _ , _ ,					
	Provision and fixing of wall mounted 4 inch LED lamps with	No	4			
	conduits, wiring, fixing elements, etc, including one gang					
6.2	switch					
	Provision and fixing of wall mounted 4 inch LED lamps with	No	25			
	conduits, wiring, fixing elements, etc, including one gang					
6.3	switch					
	Provision and fixing of main switch including piping imbedded	No	1			
	in the walls , wiring 4mm , electrical conduits, PVC box, etc.					
	To control the electrical supply for the whole building and					
	latrines . Complete job.					
6.4						
	Provision and fixing of four gang circuit breaker including the	No	1			
	PVC box, imbedded pipes in the walls, electrical wiring with		<b>_</b>			
	2.5 mm brass wires, conduits, fixing elements, etc. Complete					
6.5	provision and fixing of two gang switch with socket, including	No	5			
		NO	5			
	,imbedded pipes in the walls, electrical wiring with 2.5 mm					
	brass wires, conduits, fixing elements, etc. Complete job					
6.6						
	Extending electrical conduits to the latrine block from the	No	1			
	main distribution board( main switch) including laying of					
	electrical wires underground into buried polyethene pipes ,					
	fixing of the electrical conduits into the walls, wiring, etc.					
6.7	complete job					
0.7	Sum	marv of E	lectrical W	ork and equipment		
7	DOORS AND WINDOWS	Unit	Qty	Unit Cost	Total Cost	
	Provide, manufacture, assemble & fix metal steel doors & wind					
	Main frame from rec. steel pipe (4x8)		-			
	• Leaf from rec. steel pipe (4x8) filled with (2x4) steel pipe con	nplete with	n paint cove	ered by steel sheets	from inside.,	
	• 6 mm plain glass for fanlight.			,		
	Brass hinges.					
	<ul> <li>Horizontal mortise lock (Turkey) with int. &amp; ext. handles for doors.</li> <li>Sample of steel must be approved by ZOA Engineer.</li> </ul>					
	Provide and fix two leaves (100+20)steel door 120 x 220 cm	No	3			
/.1	for classrooms and office	NIE	12			
	Provide and fix two leaves steel window 100 x 120 cm for	No	13			
7.2	classrooms and office	L				
		5	ummary of	f Doors & Windows		

## Summary of constructing Two Classrooms and one office

No	Item Description			
1	Summary of excavation & earth movement			
2	2 Summary of concrete work			
3	Summary of Brick work			
4	Summary of Roof work			
5	Summary of finishing work			
6	Summary of Electrical Work and equipment			
7	Summary of Doors & Windows			
	Sub Total			
	VAT 17%			
	Total Amount			
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	Delivery Time			