

**ENDO WARD  
SAMBALAT WATER PROJECT FY17-18  
PROPOSED CONSTRUCTION OF 100M<sup>3</sup> GROUND MASONRY WATER TANK**

**BILL No 1. PRELIMINARY ITEMS.**

<b>Item</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
A1	<b>PROVISION OF WATER FOR CONSTRUCTION WORKS.</b>  The contractor shall allow for the provision of water for the general construction works including temporary holding structures.	Ls	Item	60,000	60,000.00
<b>Total Bill No1. carried to summary</b>					<b>60,000.00</b>

**PROJECT :- PROPOSED 100M<sup>3</sup> GROUND MASONRY TANK**

**BILL No 2. EXCAVATION AND EARTH WORKS.**

<b>Item</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
2.1	Clear site of bushes, shrubs, grub the roots and dispose of 50m away.	60	M <sup>2</sup>		
2.2	Excavate oversite to reduce levels not exceeding 1.5m deep starting from the existing ground level and remove to temporary spoil heap.	80	M <sup>3</sup>		
2.3	Extra over excavation for excavating in rock (provision).	5	M <sup>3</sup>		
2.4	Allow for keeping all the excavations free from foreign materials and general waters.	Ls	Item		
2.5	Provide and apply anti-termite solution preferably Gladiator or any other approved anti-termite solution to the general surfaces of excavations.	Ls	Item		
2.6	Provide , place and compact hardcore of approved quality 300mm thick to make up levels	25	M <sup>3</sup>		
2.7	Provide and compact 50mm thick selected murrum blinding to the surfaces of hardcore.	10	M <sup>3</sup>		
2.8	Provide and place 1000gauge polythene sheet to the surfaces of blinded hardcore.	60	M <sup>2</sup>		
<b>Sub-Total Bill No 2. carried to summary</b>					

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**BILL No 3 CONCRETE WORKS AND REINFORCEMENT.**

<b>Item</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
	<b>Reinforced concrete grade 20/20 (1:2:4) as described to the following</b>				
3.1	150mmthick floor slab mixed with 1kg water proof/50kg bag of ordinary Portland cement.	12	M <sup>3</sup>		
3.2	Ditto to 250x250mm square columns	1	M <sup>3</sup>		
3.3	Ditto to 250x250mm cross beams to the roof slab.	1.5	M <sup>3</sup>		
3.4	Ditto to 100mm thick roof slab	10	M <sup>3</sup>		
3.5	Mass concrete (1:2:4) to off take, intake and overflow pipes.	1	M <sup>3</sup>		
	<b>Provide ,handle ,cut to size and fix the following reinforcement bars as stated in the bending schedule.</b>				
3.6	12mm diameter twisted bars to beams	100	M		
3.7	Ditto to columns	80	M		
3.8	Ditto to roof slab 10mm	960	M		
3.9	Ditto to floor slab 10mm	650	M		
3.10	6mm diameter bars to beams & columns	120	M		
3.11	8mm diameter bars circumferential bars to the walls.	1050	M		

3.12	Allow for binding wires for tying the reinforcements.	50	Kg		
<b>Sub- total Bill No 3 carried to summary</b>					

**PROJECT :- PROPOSED 100M<sup>3</sup> GROUND MASONRY**

**BILL No 4 WALLING, SHUTTERING & FORMWORK.**

Item	Item Description	Qty	Unit	Rate	Amount
	<b>Provide, handle materials, mix mortar as per specification and construct</b>				
4.1	200mm thick block reinforced concrete block wall in 1:1:3 cement: water proof cement: sand mortar.	74	M <sup>2</sup>		
4.2	Sawn timber formwork to the sides of foundation slab	25	M		
4.3	Sawn timber form work to edges of the roof slab	100	M		
4.4	Sawn formwork to the soffit of the 100mm thick roof slab.	60	M <sup>2</sup>		
4.5	Sawn timber 3"x2" to the soffit of roof slab	100	M		
4.6	Struts/timber supports of approved size and quality average height 3.0m.	100	No		
4.7	Provide and fix 1000 gauge polythene sheeting to top of timber formwork to the roof slab.	60	M <sup>2</sup>		
4.8	Provide, handle and fix bondex between the tank wall and the floor slab as per the drawing.	20	Kg		
	<b>FINISHES</b>				
4.9	25mm thick cement: sand(1:3)mixed with water proof cement to the inside walls	62	M <sup>2</sup>		
4.10	Ditto the floor slab	64	M <sup>2</sup>		
4.11	Ditto to the external walls	74	M <sup>2</sup>		

4.12	Ditto to exterior surface of roof slab	62	M <sup>2</sup>		
4.13	Ditto to the interior surface of roof	64	M <sup>2</sup>		
4.14	Provide materials and apply 2coats of tryolene(rough cast) using white cement to the external walls of tank	74	M <sup>2</sup>		
<b>Sub-total Bill No 4 carried to summary</b>					

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**BILL No 5 ANCILLIARY AND PIPEWORK**

Item	Item Description	Qty	Unit	Rate	Amount
5.1	Fabricate and fix a vertical ladder comprising 25mm mild steel tubing average height 3.0m	2	No		
5.2	Fabricate and fix, 600mmx600mm x3mm thick plate , man hole covers complete with lockable device and high quality padlock	3	No		
5.3	Construct and complete in concrete block walling man hole chambers measuring 1.5mx1.5mx 1.2m high.	2	No		
5.4	Provide and install air vents to the roof slab of the tank comprising 100mm diameter G.I piece, nipple and 2No G.I elbows.	3	No		
	<b>Provide ,handle ,lay and fix the following pipes and fittings as described to:</b>				
	<b>Out let pipe</b>				
5.5	50mm diameter G.I pipe	24	M		
5.6	Ditto 90° bend	1	No		
5.7	Ditto nipple	1	No		
5.8	50x100 G.I Reducing socket	1	No		
5.9	50mm diameter sluice valve	1	No		
	<b>Scour, inlet and over flow pipes</b>				
5.10	50mm diameter G.I pipe	15	M		
5.11	50mm 90° G.I bend	2	No		
5.12	50mm diameter sluice valve	2	No		
5.13	50mm diameter G.I elbow	1	No		
5.14	50mm diameter G.I Union	1	No		
<b>Sub-Total Bill No 5 carried to summary</b>					

**PROJECT :- PROPOSED 100M<sup>3</sup> GROUND MASONRY TANK**

**SUMMARY OF BILLS.**

<b>BILL</b>	<b>BILL DESCRIPTION</b>	<b>Amount Ksh.</b>
T1	PRELIMINARY ITEMS	60,000.00
T2	EXCAVATION AND EARTH WORKS	
T3	CONCRETE WORKS AND REINFORCEMENT	
T4	WALLING, SHUTTERING AND FORM WORK	
T5	ANCILLIARY AND PIPE WORK	
<b>GRAND TOTAL CARRIED TO FORM OF TENDER</b>		

**AMOUNT IN WORDS (KSHS).....**  
 .....  
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**CONTRACTOR'S NAME.....**

**ADDRESS.....**

**SIGN.....**

**STAMP.....**