

**PROJECT: CONSTRUCTION OF MTONGWE FERRY LANDING RAMP**

**BILL No. 2 : CONCRETE AND PILING WORKS**

ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS	CTS
2/01	Allow for a provisional sum of KSh. 6,000,000.00 for geotechnical site investigations and hydrographic and bathymetric survey as directed by the Engineer.	Sum				
2/02	Mobilisation and demobilisation of equipment and personel to site	ITEM	1			
2/03	Clear site and excavate in water-logged loose sand and under water all obstacles from the seabed to a depth not exceeding 1.0m and dispose as directed by Engineer.	SM	3,000			
2/04	Dredge under water of all obstacles from reduced level to a depth not exceeding 1.5m and dispose as directed by the Engineer	SM	3,000			
2/05	Allow for keeping off seawater	ITEM				
2/06	Provide select boulders, pack and compact in layers as directed by the Engineer	CM	3,000			
2/07	Provide 75mm thick mass concrete class 15 (mix 1:3:6) blinding ready to receive the ramp slab	CM	200			
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ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS	CTS
	<b>PILES</b> <i>The rates to include setting out the piles and piling rig at each individual pile group, transfer to the next group and pitching the piles in position.</i>					
2/08	Determine depths to the sea bed where piles are to be driven before commencement of piling as directed by the Engineer	Item				
2/09	Set out the works all in accordance with the drawings	Sum				
	<b>Main Piles</b> Steel sheet piles of type: Frodingham Fx26 section: 153kg/sm steel grade 43 as specification clause 1506 including treatment and coating as specification clauses: 1523-1532; commencing surface ground level.					
2/10	Supply of piles length 10m each	No,	6			
2/11	Driving piles. Depth driven 5m	No.	6			
2/112	Provide, make and deliver to the site 559mm dia x 12mm thick steel pile approximate 18m long.	LM	480			
2/13	Sand blast the piles to first commercial quality	SM	900			
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ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS	
2/14	Apply a minimum of 3 coats of epoxy resin to attain a total minimum thickness of 2mm on piles	SM	900			
	Provide and weld 25mm thick MS plate on steel piles as pile shoe	SM	12			
2/15	Drive to required set or level vertical piles 559mm dia x 12mm thick.	LM	432			
2/16	Cut off surplus steel piles as directed by the Engineer	NO.	24			
	<b>Piles General</b>					
2/17	Delays and obstructions standby driving rig for steel piles	Hrs	400			
2/18	Allow for driving steel piles through artificial obstructions.	Hrs	200			
2/19	Provide all necessary equipment and carry out compression and pull-out pile test on vertical circular pile all in accordance with the specification or as directed by the Engineer.	NO.	2			
2/20	Redrive tested pile to required set	LM	36			
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ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS	CTS
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	<b>High tensile steel bars to BS 4461 (including fixing as per drawing, bends, hooks, tying wire and spacer blocks)</b>					
	Provide and place in position reinforcement cages inside the circular piles as follows;					
2/21	High tensile main bars to BS4461 - 20mm diameter bars	Kg	10,226			
2/22	Mild steel helical shear link bars to BS4449 - 8mm diameter bars	Kg	300			
2/23	Provide and apply approved corrosion inhibitor as zinga or equivalent on the reinforcement surfaces	SM	250			
	<b>Reinforced concrete; class 35/20; vibrated, minimum cement content of 400kg/m</b>					
2/24	Provide and place tremmie pipe concrete class 35 with expanding agent into the piles	CM	170			
2/25	Provide and apply approved curing agent for the concrete works	SM	120			
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ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS	CTS
	<b>Sawn forwork to insitu concrete as described:-</b>					
2/26	To sides of ramp deck slab	SM	500			

2/27	To sides and underside of pile caps	SM	250			
	<b>Provide and place in position reinforcements for the pile caps and ramp slab as follows;</b>					
	High tensile main bars to BS4461					
2/28	20mm diameter bars	Kg	118,368			
2/29	25mm diameter bars	Kg	1,200			
	<b>Reinforced concrete; class 35/20; (containing structural carbon fibre admixture) vibrated, minimum cement content of 400kg/m (cast in- situ concrete)</b>					
2/30	Pile caps	CM	62			
2/31	Ramp slab deck	CM	2,400			
	Provide and apply approved curing agent for the concrete works	SM	2,000			
2/32	Apply 50mm thick carbon fibre reinforced polymer system concrete topping to the ramp deck	CM	150			
2/33	Treat top surface of ramp deck with Peneseal FH, Nitoflor LH or other approved surface hardening products (anti-slip surface finish)	SM	2,400			
	<b><u>Expansion joint.</u></b>					
2/34	Provide and fix 20x20mm extruded Neoprene or any other approved joint filler to expansion joints as directed by the Engineer.	LM	100			
2/35	Provide a PC sum of Kshs. 15,000,000 for access road upgrade and drainage works on the ramp	Sum				
2/36	Provide a PC sum of Kshs. 5,000,000 for electrical works for flood lighting on the ramp	Sum				
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**BILL NO. 2: CONCRETE AND PILING WORKS**

	DESCRIPTION	KSHS.	CTS.
	<b>COLLECTION</b>		

Total Carried from Page 151..... .....		
Total Carried from Page 152..... .....		
Total Carried from Page 153..... .....		
Total Carried from Page 154..... .....		
Total Carried from Page 155..... .....		
<b>TOTAL CARRIED TO SUMMARY ON PAGE 160.....</b>		

**PROJECT: CONSTRUCTION OF MTONGWE FERRY LANDING RAMP**

**BILL NO. 3 – DAYWORKS**

ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS.	CTS.
	<u>ALL BILL IS PROVISIONAL</u>					
	<u>PLANT</u>					

	<i>The rates inserted herein are to include all operational and maintenance costs, fuel, oil, grease, drivers, turnboys, wages, supervision, overheads and profits. Only time employed on the work will be paid for.</i>					
3/01	Concrete mixer	Hrs	20			
3/02	Concrete vibrating poker type	Hrs	20			
3/03	1CM self – propelling concrete dumper	Hrs	30			
3/04	50mm delivery pump and motor	Hrs.	20			
3/05	Diesel Engine boat	Hrs	20			
3/06	Wheel Excavator with a front – loading shovel as caterpillar 428	Hrs	10			
3/07	Piling Rig	Hrs	20			
3/08	210 cu.ft. Air Compressor and equipment complete	Hrs	20			
3/09	Portable welding equipment.	Hrs	20			
3/10	M Okierman – Tary diesel hammer or equivalent	Hrs	20			
3/11	8T mobile crane	Hrs	20			
3/12	2T hand operated winch with cable complete	Hrs	20			
3/13	50T Pontoon or Barge	Hrs	20			
3/14	Ectric generator	Hrs	20			
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**BILL NO. 3 – DAYWORKS**

ITEM	DESCRIPTION	UNT	QTY	RATE	KSHS.	CTS.
	<u>LABOUR</u>					

	The rates inserted herein are to include all costs of labour such as insurance, accommodation, traveling, time, overtime, use and maintenance of small tools of trade, supervision, overheads and profits. Only actual time engaged upon the work will be paid for.					
3/15	Unskilled labour	Hrs.	20			
3/16	Artisan	Hrs.	20			
3/17	Plant Operator	Hrs.	30			
3/18	Steel Fixer and Bender	Hrs.	20			
3/18	Steel Erector	Hrs.	20			
3/19	Drilling Rig Operator	Hrs	20			
	<b><u>MATERIALS</u></b>					
	All materials to comply with the specifications. The rates inserted herein are to include delivery to the site, handling, overheads and profits					
3/20	Ordinary Portland cement	Kg	2,000			
3/21	Fine aggregate for concrete	CM	10			
3/22	Course aggregate for Concrete	CM	10			
3/23	Timber for Shuttering	SM	50			
3/24	Polyfelt TS 1000	SM	50			
3/25	High yield Steel any diameter	Kg	300			
3/26	Structural steel of any size	KG	300			
3/27	Concrete block class 1	Pcs	500			
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**BILL NO. 3 – DAYWORKS**

	DESCRIPTION		KSHS.	CTS.
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	<p><b><u>COLLECTION</u></b></p> <p>Total Carried from Page 157.....</p> <p>Total Carried from Page 158.....</p>		
<p><b>TOTAL CARRIED TO SUMMARY ON PAGE 160.....</b></p>			

**PROJECT: CONSTRUCTION OF MTONGWE FERRY LANDING RAMP**

**GRAND SUMMARY**

	DESCRIPTION	KSHS.	CTS.
	<u>SUMMARY</u>		

BILL NO. 1 : PAGE 150.....Preliminaries  
 BILL NO. 2: PAGE 156.....Concrete and Piling works  
 BILL NO. 3: PAGE 159... ..Dayworks

**SUB – TOTAL 1** .....

Add: 10% of sub-total for contingencies .....

Add: 5% of sub-total for price fluctuations.....

**SUB – TOTAL 2**.....

Add: 16% for V.A.T .....

**GRAND TOTAL CARRIED TO  
 FORM OF TENDER**

**CONTRACTOR’S NAME**

**ADDRESS:**

**SIGNATURE:**

**DATE:**

**WITNESS NAME**

**ADDRESS:**

**SIGNATURE:**

**DATE:**







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