

**BILL NO. 1 - PRELIMINARIES AND GENERAL ITEMS**

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
<b>CLASS A - GENERAL ITEMS</b> <b>Contractual Requirements</b> <b>Allow for Provision of:</b>					
11A110	Performance Security	Item	L.S		
11A120.1	Insurance for Works	Item	L.S		
11A120.2	Insurance for Contractor's Equipment	Item	L.S		
11A120.3	Insurance against Injury to Third Party Persons and Damages	Item	L.S		
<b>Testing of Materials and Works</b>					
1A250.1	Provisional sum for testing of materials as specified or directed by the Engineer	sum			150,000
1A250.2	% Adjustment to the provisional sum for Item A250.1	%	150,000.00		
<b>Project Signboards and Plaque</b>					
1A279.1	Provision, fixing, maintaining of site signboards	nr	2		
<b>Other Provisional sums</b>					
1A279.4	Provisional Sum for fees requested by various authorities and agencies	sum			50,000
1A279.5	P.C. Sum for provision of communication facilities and services for the Project Supervision Staff/Employer's staff as directed by project Manager	sum			350,000
1A279.5	% Adjustment to the provisional sum for Item A279.4 & A279.5	%	400,000		
<b>Method Related Charges</b>					
<p>In addition to the items listed hereunder, a tenderer is to insert such items as he may decide to cover, items of work relating to his intended method of executing the works, costs of which are not to be considered as allowed in the rates and prices for the other items.</p>					
<p align="center"><b>PAGE TOTAL TAKEN TO P&amp;G COLLECTION PAGE</b></p>					

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ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	<b><i>Accomodation, Buildings and Services</i></b>				
1A310	Establish, maintain and remove Contractor's camp including offices, stores, laboratories, cabins, canteens etc and services including electricity, water, security, transport, staff welfare etc	sum	1		
1A231.3	% Adjustment to the provisional sum for Items 1. A351	%			
1A41*.4	Allow a Provisional sum of Kshs. 1,650,000 to cater for monthly site meetings, as directed by the project manager	PS			1,650,000
1A42*.7	Include Percentage addition to item (A41*4 for overheads and profits	%	1,650,000		
<b>PAGE TOTAL TAKEN TO P&amp;G COLLECTION PAGE</b>					

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ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	<b>BILL 1 SECTION COLLECTION PAGE</b>				
1	BROUGHT FORWARD FROM PAGE 1				
2	BROUGHT FORWARD FROM PAGE 2				
<b>PAGE TOTAL TAKEN TO GRAND SUMMARY PAGE</b>					

**BILL NO.2 NZAI TANK REHABILITATION WORKS**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE (KShs)</b>	<b>AMOUNT (KShs)</b>
<b>2.1</b>	<b>CLASS D:DEMOLITION AND SITE CLEARANCE</b> <u>clearance shall include demolition and removal of natural and artificial articles, objects and obstructions which are above the original surface. Items for demolition and site clearance shall be deemed to include disposal of materials arising. Items for general clearance include removal of hedges and removal of hedges stumps of any diameter and disposal of materials arising of. Items for removal of trees shall include removal of stumps where required. The girth shall be measured 1m above the ground level. (provisional)</u>				
2.1.1	General clearance	ha	2.0		
2.1.2	Trees of girth 500mm - 1m	nr	5		
2.1.3	Trees of girth 1 - 2m	nr	2		
2.1.4	Stumps of diameter 150 - 500mm	nr	3		
2.1.5	Stumps of diameter 500 mm - 1m	nr	3		
2.1.6	Excavations in Soft Rock (provisional)	m3	80		
2.1.7	Excavations in Hard Rock (provisional)	m3	80		
2.1.8	Grading and levelling of reseivoir area as directed by the Engineer	m <sup>2</sup>	2,500		
2.1.9	Landscapping of tank area as directed by the Engineer	m <sup>2</sup>	2,500		
<b>2.2</b>	<b>CLASS J: PIPEWORK - FITTINGS AND VALVES (GI material) PN 40</b> <b><u>Supply, Transport to Site and Store in Secure Place and install, Including all Jointing Material, Bolts, Gaskets, Packing, Jointing Glues, etc. as Applicable</u></b>				
2.2.1	Master Meters PN40, 6", All with bolts, nuts, flanges, gaskets, and other necessary fittings, or its equivalent	No	5		
2.2.2	Master Meters PN40, 4", All with bolts, nuts, flanges, gaskets, and other necessary fittings, or its equivalent	No	1		
2.2.3	Master Meters PN40 2" All with bolts, nuts, flanges, gaskets, and other necessary fittings, or its equivalent	No	2		
<b>PAGE TOTAL CARRIED TO COLECTION PAGE</b>					

BILL NO.2 NZAI TANK REHABILITATION WORKS					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
2.2.4	Supply and install Kent Sluice valves 8" with flanges,nuts,bolts or its equivalent	Nr	6		
<b>2.3</b>	<b><u>FENCING AND GATES</u></b>				
2.3.1	Excavate for post holes, provide all materials and construct chain link fence on concrete posts at 3m centre to centre as specified 7 including straining posts at every 10th post and additional posts at corners.	m	1000		
2.3.2	Provide all materials and construct Main gate with Pedestrian section 5.0m wide and 2.5m High including 2 Nr. Pillars, footings, etc. all as detailed	Nr	1		
2.3.3	Construct 1 No Guardhouse as shown on the drawing	Nr	1		
<b>2.4</b>	<b><u>SURFACE WATER DRAINAGE</u></b>				
	<b><u>Precast Concrete Drains</u></b>				
2.4.1	Excavate trench for precast concrete invert block drain Type 'A' , including trimming of sides to receive courses and cart excavated material to tips. Depth to invert n.e. 1.0m.	m3	525		
2.4.2	-Ditto - but depth exceeding 1.0m	m3	131.25		
2.4.3	Provide, lay and joint precast concrete invert block drain Type 'A' on 100mm murrum bed, including 75mm murrum filling both sides for height of block	m	350		
2.4.4	E.O. item 1.4.3 above for provisions, laying and jointing two courses (one each side) of precast concrete side slabs to Type 'A' drain on 75mm thick compacted murrum bed	m	350		
2.4.5	-Ditto - but with 4 courses (two on each side)	m	50		
2.4.6	-Ditto - but with 6 courses (three on each side)	m	50		
<b>2.5</b>	<b><u>ROOFING OF THE RESERVOIR TANK</u></b>				
2.5.1	Supply and install Galvanized Iron sheets - 3m wide gauge 30. Price to include all installation materials including bolts and nuts	m	4800		
<b>2.6</b>	<b><u>CLASS N: MISCELLANEOUS WORKS</u></b>				
2.6.1	5.5m high GMS internal ladder 400mm wide with stringers and rugs fabricated from 40mm and 30mm Dia M.S tubes respectively	nr	2		
<b>PAGE TOTAL CARRIED TO COLECTION PAGE</b>					

BILL NO.2 NZAI TANK REHABILITATION WORKS					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
2.6.2	Provide all material, fabricate and install 1No. Permanent signboard for the Storage Reservoirs, to be decided in consultation with the Project Manager	Nr	1		
2.6.3	External Wall plastering and cement rendering as per specification	m <sup>2</sup>	600		
2.6.4	Internal Wall plastering and cement rendering as per specification	m <sup>2</sup>	600		
2.6.5	External Painting of tank walls as directed	Lsum	1		
2.6.6	Provide metallic man hole covers for the valve chambers as directed by the Engineer	Nr	8		
2.6.7	Repair of the ventilations,tank,outlet/inlet and scouring systems, and associated structures as guided	Lsum	1		
2.6.8	<b>Erosion protection</b> Backfilling of areas affected by erosion as directed by the Engineer	m3	2250		
2.6.9	Provision of Gabion boxes as directed by the Engineer to control erosion.	Lsum	1		
2.6.10	Construction of Grade 9 houses as directed including electrical system, plumbing works and septic tanks	Nr	1		
2.6.11	Grading and Graveling the access road as directed (2km)	m	2000		
2.6.12	KPLC Electricity connection and putting up lighting system to the grade 9 house and tank security lighting with 4No lamp posts as directed	Lsum	1.00		
<b>PAGE TOTAL CARRIED TO COLLECTION</b>					

**BILL NO.2 NZAI TANK REHABILITATION WORKS**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	<p><b>COLLECTION SHEET</b></p> <p>BROUGHT FORWARD FROM PAGE 1</p> <p>BROUGHT FORWARD FROM PAGE 2</p> <p>BROUGHT FORWARD FROM PAGE 3</p>				
<b>COLLECTION CARRIED TO SUMMARY PAGE</b>					

**BILL NO.2 NOLTURESH PIPELINE REHABILITATION WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
1.1	<p><b>CLASS D:DEMOLITION AND SITE CLEARANCE</b>  <u>clearance shall include demolition and removal of natural and artificial articles, objects and obstructions which are above the original surface. Items for demolition and site clearance shall be deemed to include disposal of materials arising. Items for general clearance include removal of hedges and removal of hedges stumps of any diameter and disposal of materials arising of. Items for removal of trees shall include removal of stumps where required. The girth shall be measured 1m above the ground level. (provisional)</u></p>				
1.1.1	General clearance	ha	2.0		
1.2	<p><b>CLASS J: PIPEWORK - FITTINGS AND VALVES (GI material) PN 40</b>  <u>Supply, Transport to Site and Store in Secure Place. Including all Jointing Material, Bolts, Gaskets, Packing, Jointing Glues, etc. as Applicable</u></p>				
1.2.1	Double air valve PN 40, 50mm	Nr	30		
1.2.2	Double air valve PN 40, 80mm	Nr	4		
1.2.3	Double air valve PN 40, 100mm	Nr	4		
1.2.4	Washout vessel,100mm	Nr	4		
1.2.5	Washout vessel, 150mm	Nr	4		
1.2.6	Sluice valve PN 40, 50mm	Nr	30		
1.2.7	Sluice valve PN 40, 80mm	Nr	4		
1.2.8	Sluice valve PN 40, 100mm	Nr	8		
1.2.9	Sluice valve PN 40, 150mm	Nr	4		
1.2.10	GI 90° bend, 50mm	Nr	2		
1.2.11	Plastic framed lockable covers 2ft x 2ft	Nr	20		
1.2.12	GS flanges flat, 80mm	Nr	8		
1.2.13	GS flanged flat, 100mm	Nr	16		
1.2.14	GS flanges, 150mm	Nr	8		
1.2.15	Bolts and nuts, MS14	Nr	300		
1.2.16	Bolts and nuts, MS 16	Nr	300		
1.2.17	Rubber insertion 5mm	Nr	30		
<b>PAGE TOTAL CARRIED TO COLLECTION</b>					



ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
<p>1.3</p> <p>1.3.1</p> <p>1.3.2</p>	<p><b>Electrical works at PS 1</b></p> <p>Power supply reconnection and servicing of the pumps at PS 1 as directed by the Engineer</p> <p>Allow for Contractors overhead cost and profit on item 1.3.1</p>	<p>Lsum</p> <p>%</p>			<p>3,700,000</p>
<p><b>PAGE TOTAL CARRIED TO COLLECTION</b></p>					

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	<p><b>COLLECTION SHEET</b></p> <p>BROUGHT FORWARD FROM PAGE 1</p> <p>BROUGHT FORWARD FROM PAGE 2</p>				
<b>COLLECTION CARRIED TO SUMMARY PAGE</b>					