

MALINDI WATER & SEWERAGE COMPANY LIMITED		
CONSTRUCTION OF MAJENGO MAPYA-MTAKATENI WATER PROJECT (UPC 8TH CALL)		
BILL	DESCRIPTION	AMOUNT IN PHASE I (KSH)
1	BILL 1. CONSUMER METERS & CONNECTIONS	-
2	BILL 2. MAJENGO MAPYA PIPELINE	-
3	BILL 3. MTAKATENI DISTRIBUTION MAIN	-
4	BILL 4. MTAKATENI DITRIBUTION TERTIARY	-
5	BILL 5. MASHAMBA-MKUNGUNI DISTRIBUTION	-
6	BILL 6. YARD TAPS (2 No.)	-
	Sub-Total 2 (Works)	-
	GRAND TOTAL	-
IN WORDS		
.....		
Name		
Address		
Signature		
Date		
Stamp		

MALINDI WATER & SEWERAGE COMPANY LIMITED						
CONSTRUCTION OF MAJENGO MAPYA PIPELINE						
BILL No. : 1 CONSUMER CONNECTIONS						
No.	Description	Unit	Quantity	Unit Cost	Total Cost	
	Materials		No.	KSh	KSh	
1	Supply and delivery of DN 15mm (Meter Class RI60) Composite Volumetric AMR enabled cold water meters c/w meter liners	No.	130			-
3	Saddle Clamps 63mm x 1"	No.	20			-
4	Saddle Clamps 90mm x1"	No.	4			-
6	PP Reducing Bush 1"x3/4"	No.	24			-
7	DN 20 mm PP Junction Tees Equal	No.	110			-
8	DN 20 mm -PP Elbows	No.	780			-
9	DN 20 mm -PP Nipples	No.	650			-
10	DN 20 mm -PP Union	No.	60			-
11	DN (3/4" x 1/2")-PP Reducing Bush	No.	260			-
12	DN 20 mm -PP Pipes	No.	130			-
13	Threaded Gate valves DN 20mm/(3/4")	No.	290			-
14	HDPE BMN Male Adaptors 25mm x 3/4"	No.	520			-
15	Bib Tap 3/4"	No.	130			-
16	HDPE Pipe DN25 PN10	Mts.	2,600			-
Total Materials Cost:						-
Notes:	Include the make for meters in the column "Specifications"					
	The water meters are intended for:					
	* Metering of unmetered connections (legal and illegal) within the kiosk catchment area					
	* Replacement of stuck/malfunctioning meters within the kiosk catchment areas					

No.	Description		Unit	Quantity	Unit Cost	Total Cost
	Labour			No.	KSh	KSh
1	Installation/ Connection Surcharge		No.	130		-
2	Excavation & Backfilling for individual connections		Mtrs.	2600		-
Total Labour Cost:						-
Please insert rows if necessary						
SUMMARY COST						
No.	Description		Unit	Quantity	Unit Cost	Total Cost
				No.	KSh	KSh
1	Materials cost		Sum	1		-
2	Labour cost		Item	1		-
Grand Total:						-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	CLASS A: GENERAL ITEM				
A26	Testing of Works				
A261	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. Nominal bore n.e 200mm	m	1,600		-

A262	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hypochlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	1,600		-
A3	Method Related Charges				-
	The Pipeline will be laid along narrow urban roads with existing active services both on the surface (electricity, etc) and buried (existing community water pipelines, fiber optic cables, etc.) and with limited working space for mechanical excavation equipment.				-
	The Contractor's rates shall be deemed to include for any measures necessary to deal with these conditions, provision of access road to work site, liaison with relevant authorities and local residents, payment of any required statutory charges, etc. The Contractor will be required to submit Method Statement for execution of works under these specific conditions for approval prior to execution of the works. These include but are not limited to the following: i. No blasting will be permitted in these areas ii. The Contractor to maintain uninterrupted continuity of water supply in existing pipelines iii. Pedestrian and vehicular Access to individual shops / plots to be maintained at all times iv. Safety hoarding, lighting, bands, warning signs, etc. to be maintained at all times. v. Keeping trenches free of excessive groundwater, seepage or water from any source				-
A35.1	Cost relating to the above mentioned specific conditions	Item	L.S		-
A35.2	Liaison, facilitation with local residents and relevant authorities and payment for access, accidental damage, temporary access to working spaces during execution of the Works, etc.	Item	L.S		-
A35.3	Allow for any other method related charges the Bidder feels may be required. These should be indicated below with pricing for each item (Tenderer may attach additional sheets if necessary)				-

	i)	Item	L.S		-
	ii)	Item	L.S		-
	CLASS D: DEMOLITION AND SITE CLEARANCE				-
D1	General site clearance along the pipeline alignment	ha	0.48		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	PIPES, FITTINGS AND VALVES				
	CLASS I: PIPE WORK - PIPES				
I7	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				
	High Density Polyethylene Pipe (HDPE) rolls. PN 10				
I711.1	Nominal bore 160mm not in trenches	m	1600		-
I5	uPVC Class "B" Socket and Spigot pipes for draining of washouts (Provisional)				-
I511	OD 90mm	m	6		-
	Transport from Site Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reinstatement				-

I7	High Density Polyethylene Pipes (HDPE) rolls - PN 10 with butt fusion (seamless jointing)				-
	Nominal bore 160mm in Trenches				-
I712	Depth not exceeding 1.5m	m	1,600		-
I5	uPVC Class "B" Socket and Spigot pipes for Draining of Washouts (Provisional)				-
	Nominal Bore 90mm in Trenches				-
I512	Depth not exceeding 1.5m	m	6		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				-
	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
A-J32	Junction and Branches				-
	All Flanged Tee				-
A-J321.1	ND 150 x ND 150	Nr	2		-
	All Flanged Level Invert Tee (For Washouts)				-
A-J321.4	ND 150 x ND 80	Nr	1		-
J-33	All Flanged Concentric Taper				-
A-J331	ND 150 x ND 80	Nr	1		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					

CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Coupling				
A-J34	VJ Couplings				
A-J341.1	ND 150	Nr	2		-
A-J35	Ferrous Flange Adaptor				-
A-J351.1	ND 150	Nr	2		-
A-J351.2	ND 90	Nr	1		-
A-J38	Straight Specials				-
	Single Flanged Pipes				-
A-J381.1	ND 150mm, 1.5m long	Nr	3		-
A-J39	Blank Flange				-
A-J391.1	ND 150mm	Nr	1		-
A-J41	uPVC Socket & Spigot Bends				-
	Nominal bore n.e. 200mm				-
A-J411	ND 90mm				-
A-J411	90°	Nr	2		-

A-J6	Polyethlyne (HPDE) Fittings				-
	HDPE Plain Ended Bend				-
A-J611	Nominal Bore n.e. 200mm				-
	ND 160mm				-
A-J611.1	45°	Nr	6		-
A-J62	HDPE Saddle Clamp PN 10				-
A-J621	ND 160mm x25mm Saddle Clamp (For Airvalves)	Nr	2		-
A-J65	P.E Flange Adaptor (Stub End)				-
A-J651	OD 160	Nr	6		-
A-J8	Valves and Penstocks				-
A-J81	All Flanged Gate Valves				-
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
A-J811.3	DN 150	Nr	2		-
A-J811.4	DN 80	Nr	1		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					

CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Threaded non-rising Spindle Gate Valves for Air valves				
A- J811.3	DN 25	Nr	2		-
A-J86	Air Valves				-
A-J861	Single Orifice Air Valve				-
A- J861.1	DN 25	Nr	2		-
J10	Polypropylene (PP) Fittings for Air Valves				-
	PP Pipe Piece				-
	Nominal Bore not exceeding 200				-
A- J104.1	ND 25 n.e. 1.0 m long	Nr	2		-
	PP Socket (for AV)				-
A- J104.2	ND 25	Nr	2		-
	PP Nipple (for AV)				-
A- J104.3	ND 25	Nr	2		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				-

	Transport from Site, Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reistatement				-
J3	Epoxy coated Externally and Epoxy or Cement Mortar lined Internally Ferrous Pipes and Fittings				-
B-J32	Junction and Branches				-
	All Flanged Tee				-
B-J321.1	ND 150 x ND 150	Nr	1		-
	All Flanged Level Invert Tee (For Washouts)				-
B-J321.2	ND 150 x ND 80	Nr	1		-
J-33	All Flanged Concentric Taper				-
B-J331	ND 150 x ND 80	Nr	1		-
	Coupling				-
B-J34	VJ Couplings				-
B-J341	ND 150	Nr	2		-
B-J35	Ferrous Flange Adaptor				-
B-J351.1	ND 150	Nr	2		-
B-J351.2	ND 80	Nr	2		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
B-J38	Straight Specials				
	Single Flanged Pipes				
B-J381.1	ND 150mm, 1.5m long	Nr	2		-
B-J39	Blank Flange				-
B-J391.1	ND 150mm	Nr	1		-
B-J41	uPVC Socket & Spigot Bends				-
	Nominal bore n.e. 200mm				-
B-J411	ND 90mm				-
B-J411	90°	Nr	2		-
B-J6	HDPE Fittings				-
B-J61	HDPE Plain Ended Bend				-
	Nominal Bore n.e. 200mm				-
B-J611	ND 160mm				-
B-J611	45°	Nr	6		-

B-J62	HDPE Saddle Clamp PN 10				-
B-J621	ND 160mm x25mm Saddle Clamp (For Airvalves)	Nr	2		-
B-J65	P.E Flange Adaptor (Stub End)				-
B-J651	OD 160	Nr	6		-
B-J8	Valves and Penstocks				-
B-J81	All Flanged Gate Valves				-
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
B-J811.3	DN 150	Nr	2		-
B-J811.4	DN 90	Nr	2		-
	Threaded non-rising Spindle Gate Valves for Air valves				-
B-J811.3	DN 25	Nr	2		-
B-J86	Air Valves				-
B-J861	Single Orifice Air Valve				-
B-J861.1	DN 25	Nr	2		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					

CONSTRUCTION OF MAJENGO MAPYA PIPELINE**BILL No. : 2 PIPEWORK**

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
B10	Polypropylene (PP) Fittings for Air Valves				
B-J104	PP Socket (for AV)				
B- J1041.1	ND 25	Nr	2		-
B-J105	PP Nipple (for AV)				-
B- J1051.1	ND 25	Nr	2		-
	Note:- Items for Work in this class shall include: - Excavation, preparation of surfaces, disposals of surplus excavated material, shoring sides of excavation, backfilling and removal of redundant services. -Concrete, Reinforcement, Formwork, joints and Finishes. -Tips for disposals of excavated material of debris to be identified by the Contractor in liaison with the Local Authorities.				-
K21	IN SITU MASONARY CHAMBERS				-
K211.1	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1200mm x 1200mm. Include for supply and fixing of removable precast concrete covers, step irons, compacted granular fill, rendering of exposed blockwork etc. All as detailed on Drawing No. M410/SD/02. Depth n.e 1.5m.	Nr	6		-
K8	Other Pipework Ancillaries				-
K82	Supply and fix marker posts along water Main Route, Road Crossings, change of direction, Air valves, Washouts and valve chambers. All in accordance with drawings and specifications as in drg No. M410/SD/07	Nr	22		-

K871	Provide all materials and construct Masonry outfall structures on mass concrete plinths at washout drain pipe outlets.	Nr	1		-
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				-
L1	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				-
L11	In Pipe Trenches and Chambers				-
L111.1	Excavation in trench for rock class "C"	m3	58		-
	Note:- Blasting is NOT permitted for Item L11				-
L7	Concrete Support: Thrust Blocks, Stools and Anchor Blocks				-
	Rates to include for excavation, Formwork, provision and placing of concrete, backfilling etc.				-
	Class 20/20 Mass Concrete				-
	NOTE:- The work includes pipe and fitting fixing				-
L71	Volume n.e 0.1m3				-
L711	To pipes nominal bore n.e 200mm	Nr	5		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA PIPELINE					
BILL No. : 2 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)

	Page Total, Page 1 of 6	-			-
	Page Total, Page 2 of 6	-			-
	Page Total, Page 3 of 6	-			-
	Page Total, Page 4 of 6	-			-
	Page Total, Page 5 of 6	-			-
	Page Total, Page 6 of 6	-			-
Bill No. 2 Total Inclusive of VAT Carried to Section 2 Summary Sheet		-			-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	CLASS A: GENERAL ITEM				
A26	Testing of Works				
A261	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks, Provision, Transportation and use and disposal of Water, Pipe Fittings, etc. Nominal bore n.e 90mm	m	1,000		-
A262	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hypochlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	1,000		-

A3	Method Related Charges				-
	The Pipeline will be laid along narrow urban roads with existing active services both on the surface (electricity, etc) and buried (existing community water pipelines, fiber optic cables, etc.) and with limited working space for mechanical excavation equipment.				-
	<p>The Contractor's rates shall be deemed to include for any measures necessary to deal with these conditions, provision of access road to work site, liaison with relevant authorities and local residents, payment of any required statutory charges, etc. The Contractor will be required to submit Method Statement for execution of works under these specific conditions for approval prior to execution of the works. These include but are not limited to the following:</p> <ul style="list-style-type: none"> i. No blasting will be permitted in these areas ii. The Contractor to maintain uninterrupted continuity of water supply in existing pipelines iii. Pedestrian and vehicular Access to individual shops / plots to be maintained at all times iv. Safety hoarding, lighting, bands, warning signs, etc. to be maintained at all times. v. Keeping trenches free of excessive groundwater, seepage or water from any source 				-
A35.1	Cost relating to the above mentioned specific conditions	Item	L.S		-
A35.2	Liaison, facilitation with local residents and relevant authorities and payment for access, accidental damage, temporary access to working spaces during execution of the Works, etc.	Item	L.S		-
A35.3	Allow for any other method related charges the Bidder feels may be required. These should be indicated below with pricing for each item (Tenderer may attach additional sheets if necessary)				-

	i)	Item	L.S		-
	ii)	Item	L.S		-
	CLASS D: DEMOLITION AND SITE CLEARANCE				-
D1	General site clearance along the pipeline alignment	ha	0.30		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
D2	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips				
D21.1	Girth: 0.5 m - 1.0 m	Nr	5		-
	Note:- Girth shall be measured 1.0m above ground level				-
	CLASS I: PIPE WORK - PIPES				-
I7	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
	High Density Polyethylene Pipe (HDPE) rolls. PN 10				-
I711.1	Nominal bore 90mm not in trenches	m	1000		-
I5	uPVC Class "B" Socket and Spigot pipes for draining of washouts (Provisional)				-

I511	OD 63mm	m	6		-
	Transport from Site Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reinstatement				-
I7	High Density Polyethylene Pipes (HDPE) rolls - PN 10 with butt fusion (seamless jointing)				-
	Nominal bore 90mm in Trenches				-
I712.1	Depth not exceeding 1.5m	m	1,000		-
I5	uPVC Class "B" Socket and Spigot pipes for Draining of Washouts (Provisional)				-
	Nominal Bore 63mm in Trenches				-
I512	Depth not exceeding 1.5m	m	6		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				-
	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
J3	Epoxy coated Externally and Epoxy or Cement Mortar lined Internally Ferrous Pipes and Fittings				-
A-J31	Bends				-
A-J31	All Flanged Bends				-
	Nominal bore n.e 200mm				-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
A-J311.2	ND 90mm				
A-J311.2	90°	Nr	2		-
A-J32	Junction and Branches				-
	All Flanged Tee				-
A-J321.1	ND 200 x ND 90	Nr	1		-
	All Flanged Level Invert Tee (For Washouts)				-
A-J321.2	ND 90 x ND 50	Nr	1		-
A-J35	Ferrous Flange Adaptor				-
A-J351.1	ND 90	Nr	3		-
A-J351.2	ND 50	Nr	2		-
A-J38	Straight Specials				-
	Single Flanged Pipes				-
A-J381.1	ND 90mm, 1.5m long	Nr	3		-
A-J39	Blank Flange				-
A-	ND 90mm	Nr	1		

J391.1					-
A-J41	uPVC Socket & Spigot Bends				-
	Nominal bore n.e. 200mm				-
A-J411	ND 63mm				-
A-J411	90°	Nr	2		-
A-J6	Polyethlyne (HPDE) Fittings				-
A-J62	HDPE Saddle Clamp PN 10				-
A-J621.1	ND 90mm x25mm Saddle Clamp (For Airvalves)	Nr	1		-
A-J65	P.E Flange Adaptor (Stub End)				-
A-J651	OD 200	Nr	2		-
A-J652	OD 90	Nr	4		-
A-J8	Valves and Penstocks				-
A-J81	All Flanged Gate Valves				-
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
A-J811	DN 80	Nr	2		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED**CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT****BILL No. : 3 PIPEWORK**

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Threaded non-rising Spindle Gate Valves for Air valves				
A-J811.3	DN 25	Nr	1		-
A-J86	Air Valves				-
A-J861	Single Orifice Air Valve				-
A-J861.1	DN 25	Nr	1		-
A-J91.1	Flanged Water Meters				-
A-J91.1	DN 80	Nr	1		-
A-J91.2	All Flanged Strainer				-
A-J91.2	DN 90	Nr	1		-
	PP Pipe Piece				-
	Nominal Bore not exceeding 200				-
A-J104.1	ND 25 n.e. 1.0 m long	Nr	1		-
	PP Socket (for AV)				-
A-J104.2	ND 25	Nr	1		-
	PP Nipple (for AV)				

					-
A-J1041.3	ND 25	Nr	1		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				-
	Transport from Site, Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reistatement				-
J3	Epoxy coated Externally and Epoxy or Cement Mortar lined Internally Ferrous Pipes and Fittings				-
B-J31	Bends				-
B-J31	All Flanged Bends				-
	Nominal bore n.e 200mm				-
B-J311.2	ND 80mm				-
B-J311.2	90°	Nr	2		-
B-J32	Junction and Branches				-
	Plain Ended with Flanged Branch Tee				-
B-J321.1	ND 200 x ND 80	Nr	1		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					

BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	All Flanged Level Invert Tee (For Washouts)				
B-J321.2	ND 80 x ND 50	Nr	1		-
B-J35	Ferrous Flange Adaptor				-
B-J351.1	ND 80	Nr	3		-
B-J351.2	ND 50	Nr	1		-
B-J38	Straight Specials				-
	Single Flanged Pipes				-
B-J381.1	ND 80mm, 1.5m long	Nr	3		-
B-J39	Blank Flange				-
B-J391.1	ND 90mm	Nr	1		-
B-J41	uPVC Socket & Spigot Bends				-
	Nominal bore n.e. 200mm				-
B-J411	ND 63mm				-
B-J411	90°	Nr	2		-
B-J6	Polyethlyne (HPDE) Fittings				-
B-J62	HDPE Saddle Clamp PN 10				-

B-J621.1	ND 90mm x 25mm Saddle Clamp (For Airvalves)	Nr	1		-
B-J65	P.E Flange Adaptor (Stub End)				-
B-J651	OD 90	Nr	4		-
B-J8	Valves and Penstocks				-
B-J81	All Flanged Gate Valves				-
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
B-J811	DN 80	Nr	2		-
	Threaded non-rising Spindle Gate Valves for Air valves				-
B-J811.3	DN 25	Nr	1		-
B-J86	Air Valves				-
B-J861	Single Orifice Air Valve				-
B-J861.1	DN 25	Nr	1		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
B-J91.1	Flanged Water Meters				
B-J91.1	DN 80	Nr	1		-
B-J91.2	All Flanged Strainer				-
B-J91.2	DN 80	Nr	1		-
J10	Polypropylene (PP) Fittings for Air Valves				-
	PP Pipe Piece				-
	Nominal Bore not exceeding 200				-
B-J104.1	ND 25 n.e. 1.0 m long	Nr	1		-
	PP Socket (for AV)				-
B-J104.2	ND 25	Nr	1		-
	PP Nipple (for AV)				-
B-J1041.3	ND 25	Nr	1		-
	Note:- Items for Work in this class shall include: - Excavation, preparation of surfaces, disposals of surplus exvacated material, shoring sides of excavation, backfilling and removal of redundant services. -Concrete, Reinforcement, Fromwork,joints and Finishes. -Tips for disposals of excavated material of debris to be identified by the Contractor in liaison with the Local Authorities.				-
K21	IN SITU MASONARY CHAMBERS				

					-
K211.1	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1200mm x 1200mm. Include for supply and fixing of removable precast concrete covers, step irons, compacted granular fill, rendering of exposed blockwork etc. All as detailed on Drawing No. M410/SD/02. Depth n.e 1.5m.	Nr	5		-
K8	Other Pipework Ancillaries				-
K82	Supply and fix marker posts along water Main Route, Road Crossings, change of direction, Air valves, Washouts and valve chambers. All in accordance with drawings and specifications as in drg No. M410/SD/07	Nr	16		-
K871	Provide all materials and construct Masonry outfall structures on mass concrete plinths at washout drain pipe outlets.	Nr	1		-
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				-
L1	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				-
L11	In Pipe Trenches and Chambers				-
L111.1	Excavation in trench for rock class "A"	m ³	144.00		-
	Note:- Blasting is NOT permitted for Item L11				-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)

	Rates to include for excavation, Formwork, provision and placing of concrete, backfilling etc.				
	Class 20/20 Mass Concrete				
	NOTE:- The work includes pipe and fitting fixing				
L71	Volume n.e 0.1m ³				
L711	To pipes nominal bore n.e 200mm	Nr	3		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. : 3 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Page Total, Page 1 of 7				-
	Page Total, Page 2 of 7				-
	Page Total, Page 3 of 7				-
	Page Total, Page 4 of 7				-
	Page Total, Page 5 of 7				-
	Page Total, Page 6 of 7				-
	Page Total, Page 7 of 7				-
Bill No. 3 Total Inclusive of VAT Carried to Section 2 Summary Sheet		-			-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	CLASS A: GENERAL ITEM				
A26	Testing of Works				
A261	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks, Provision, Transportation and use and disposal of Water, Pipe Fittings, etc. Nominal bore n.e. 200mm	m	1,500		-
A262	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hypochlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	1,500		-
A3	Method Related Charges				-
	The Pipeline will be laid along narrow urban roads with existing active services both on the surface (electricity, etc) and buried (existing community water pipelines, fiber optic cables, etc.) and with limited working space for mechanical excavation equipment.				-

	<p>The Contractor's rates shall be deemed to include for any measures necessary to deal with these conditions, provision of access road to work site, liaison with relevant authorities and local residents, payment of any required statutory charges, etc. The Contractor will be required to submit Method Statement for execution of works under these specific conditions for approval prior to execution of the works. These include but are not limited to the following:</p> <ul style="list-style-type: none"> i. No blasting will be permitted in these areas ii. The Contractor to maintain uninterrupted continuity of water supply in existing pipelines iii. Pedestrian and vehicular Access to individual shops / plots to be maintained at all times iv. Safety hoarding, lighting, bands, warning signs, etc. to be maintained at all times. v. Keeping trenches free of excessive groundwater, seepage or water from any source 				-
A35.1	Cost relating to the above mentioned specific conditions	Item	L.S		-
A35.2	Liaison, facilitation with local residents and relevant authorities and payment for access, accidental damage, temporary access to working spaces during execution of the Works, etc.	Item	L.S		-
A35.3	Allow for any other method related charges the Bidder feels may be required. These should be indicated below with pricing for each item (Tenderer may attach additional sheets if necessary)				-
	i)	Item	L.S		-
	ii)	Item	L.S		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	CLASS D: DEMOLITION AND SITE CLEARANCE				
D1	General site clearance along the pipeline alignment	ha	0.45		-
D2	Tree Cutting (Provisional)				-
	Cut down trees, grub up roots and cart away to tips				-
D211	Girth: 0.5 m - 1.0 m	Nr	5		-
	Note:- Girth shall be measured 1.0m above ground level				-
	CLASS I: PIPE WORK - PIPES				-
I	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
I7	High Density Polythylene (HDPE)Pipes PN10 pe100				-
I711	Nominal bore not exceeding 200mm not in Trenches				-
I711.2	ND 63	m	1500		-
	Transport from Site Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reinstatement				-
I7	High Density Polyethylene Pipes (HDPE) rolls - PN 10				-
	Nominal bore 63mm in Trenches				-
I712.2	Depth not exceeding 1.5m	m	1500		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES -				

	PN16				-
	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
J3	Epoxy Coated Externally and Epoxy or Cement Mortar lined Internally Ferrous Pipes and Fittings				-
A-J32	Junction and Branches				-
	All Flanged Tee				-
A-J321.1	ND 80 x ND 50	Nr	3		-
A-J35	Steel Ring Flange Adaptor with internal threads				-
A-J351.1	ND 50	Nr	3		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
A-J6	High Density Polyethylene (HDPE) Fittings				
A-J62	HDPE Saddle Clamp PN 10				
A-J621.1	ND 63mm x25mm Saddle Clamp (For Airvalves)	Nr	3		-
A-J64	BMN Coupling				-
A-J641	OD 63mm	Nr	15		-
A-J65	Male Adaptor				-

A-J651.1	OD 63mm/2"	Nr	10		-
	HDPE Flange Adaptor (Stub End) PE 100 SDR11 - complete with Steel Ring, Bolts, Nuts & Washers				-
A-J651.2	OD 90	Nr	6		-
A-J8	Valves, Penstocks, Hydrants, Meters				-
A-J81	All Flanged Gate Valves				-
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
A-J811.1	DN 50	Nr	3		-
	Threaded non-rising Spindle Valves				-
A-J811.3	DN 25	Nr	3		-
A-J811.4	DN 50	Nr	1		-
A-J86	Air Valves				-
	Single Orifice Air Valve				-
A-J861	DN 25mm Air valve anti-shock/ anti-surge, with threaded base, polypropylene-reinforced body-operating pressure 0.2-16 Bars (small orifice)	Nr	3		-
J10	Polypropylene (PP) Fittings for Washouts				-
	PP TEE				-
A-J100	DN 50mm	Nr	1		-

A-J101	PP Elbows				-
A-J1011	ND 50mm	Nr	2		-
A-J103	Collars				-
	PP Nipples				-
A-J1031.1	ND 50	Nr	1		-
A-J1031.2	ND 25mm	Nr	3		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
A-J104	PP Coupler				
A-J1041.1	ND 25	Nr	3		-
A-J1041.2	ND 50	Nr	2		-
	PP Male threaded Plug				-
A-J1041.3	ND 50	Nr	4		-
	PP Pipe piece				-
	Nominal bore n.e 50mm				-

A-J1041.4	ND 25mm, n.e. 1.0m long	Nr	3		-
A-J1041.5	ND 50mm,n.e 6.0m long	Nr	1		-
	Transport from Site, Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reistatement				-
J3	Epoxy Coated Externally and Epoxy or Cement Mortar lined Internally Ferrous Pipes and Fittings				-
B-J32	Junction and Branches				-
	All Flanged Tee				-
B-J321.1	ND 80 x ND 50	Nr	3		-
B-J35	Steel Ring Flange Adaptor with internal threads				-
B-J351.1	ND 50	Nr	3		-
B-J6	High Density Polyethylene (HDPE) Fittings				-
B-J62	HDPE Saddle Clamp PN 10				-
B-J621.1	ND 63mm x25mm Saddle Clamp (For Airvalves)	Nr	3		-
B-J64	BMN Coupling				-
B-J641	OD 63mm	Nr	15		-
B-J65	Male Adaptor				-
B-J651.1	OD 63mm/2"	Nr	10		-

	HDPE Flange Adaptor (Stub End) PE 100 SDR11 - complete with Steel Ring, Bolts, Nuts & Washers				-
B-J651.2	OD 90	Nr	6		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
B-J81	All Flanged Gate Valves				
	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				
B-J811.1	DN 50	Nr	1		-
	Threaded non-rising Spindle Valves				-
B-J811.3	DN 25	Nr	3		-
B-J811.4	DN 50	Nr	1		-
B-J86	Air Valves				-
	Single Orifice Air Valve				-
B-J861	DN 25mm Air valve anti-shock/ anti-surge, with threaded base, polypropylene-reinforced body-operating pressure 0.2-16 Bars (small orifice)	Nr	3		-
J10	Polypropylene (PP) Fittings for Washouts				-
	PP TEE				

B-J100	DN 50mm	Nr	1		-
B-J101	PP Elbows				-
B-J1011	ND 50mm	Nr	2		-
B-J103	Collars				-
	PP Nipples				-
B-J1031.1	ND 50	Nr	1		-
B-J1031.2	ND 25mm	Nr	3		-
B-J104	PP Coupler				-
B-J1041.1	ND 25	Nr	3		-
B-J1041.2	ND 50	Nr	2		-
	PP Male threaded Plug				-
B-J1041.3	ND 50	Nr	4		-
	PP Pipe piece				-
	Nominal bore n.e 50mm				-
B-J1041.4	ND 25mm, n.e. 1.0m long	Nr	3		-
B-J1041.5	ND 50mm,n.e 6.0m long	Nr	1		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-

MALINDI WATER & SEWERAGE COMPANY LIMITED**CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY****BILL No. : 4 PIPEWORK**

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				
	Note:- Items for Work in this class shall include: - Excavation, preparation of surfaces, disposals of surplus excavated material, shoring sides of excavation, backfilling and removal of redundant services. -Concrete, Reinforcement, Formwork,joints and Finishes. -Tips for disposals of excavated material of debris to be identified by the Contractor in liaison with the Local Authorities.				
K21	IN SITU MASONARY CHAMBERS				
K211	Provide all materials and construct Masonry walling Chambers, internal dimensions 1200mm x 1200mm. Include for supply and fixing of removable precast concrete covers, step irons, compacted granular fill, rendering of exposed blockwork etc. Depth n.e 1.5m	Nr	7		-
K8	Other Pipework Ancillaries				-
K821	Supply and fix marker posts along water Main Route, Road Crossings, change of direction, Air valves, Washouts and valve chambers. All in accordance with Engineer's instructions provided.	Nr	25		-
K822	Provide all materials and construct Masonry outfall structures on mass concrete plinths at washout drain pipe outlets.	Nr	1		-
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				-

L1	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				-
L11	In Pipe Trenches and Chambers				-
L111.1	Excavation in trench for rock class "A"	m ³	216.00		-
	Note:- Blasting is NOT permitted for Item L11				-
L5	Surrounds				-
L52	Selected Excavated Granular Fill (Provisional)				-
	Provide, place and compact selected excavated granular fill material in bed and surround to pipes as specified and where directed by the Engineer.				-
L521	To pipes nominal bore n.e 200mm	m	1500		-
L7	Concrete Support, Thrust Blocks, Stools and Anchor Blocks				-
	Rates to include for excavation, Formwork, provision and placing of concrete, backfilling etc.				-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Class 20/20 Mass Concrete				
	NOTE:- The work includes pipe and fitting fixing				
L71	Volume n.e 0.1m ³				

L711	To pipes nominal bore n.e 100mm	Nr	2		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MTAKATENI DISTRIBUTION TERTIARY					
BILL No. : 4 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Page Total, Page 1 of 7	-			-
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	Page Total, Page 3 of 7	-			-
	Page Total, Page 4 of 7	-			-
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Bill No. 4 Total Inclusive of VAT Carried to Section 2 Summary Sheet		-			-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)

	CLASS A: GENERAL ITEM				
A26	Testing of Works				
A261	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Blocks, Anchor Blocks, Provision, Transportation and use and disposal of Water, Pipe Fittings, etc. Nominal bore n.e. 200mm	m	1,350		-
A262	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hypochlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	1,350		-
	CLASS D: DEMOLITION AND SITE CLEARANCE				-
D1	General site clearance along the pipeline alignment (3m wide)	ha	0.41		-
	PIPES, FITTINGS AND VALVES				-
	CLASS I: PIPE WORK - PIPES				-
I	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
I7	High Density Polyethylene (HDPE) Pipes PN 12.5 pe100				-
I711	Nominal bore not exceeding 200mm not in Trenches				-
I711	ND 63	m	1350		-
	Transport from Site Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final				-

	Reinstatement				
I7	High Density Polyethylene Pipes (HDPE) rolls - PN 12.5 with butt fusion (seamless) jointing				-
I71	Nominal bore 63mm in Trenches				-
I712	Depth not exceeding 1.5m	m	1350		-
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				-
	Supply, Transport to Site and Store in Secure Place. Include Supply of Jointing Materials, Bolts, Nuts, Gaskets etc. as Applicable				-
A-J32	Junction and Branches				-
	Flanged Tee with threaded branch				-
A-J321.1	ND 80 x ND 50	Nr	1		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
A-J34	Double Collars				
	Ranger Coupling				
A-J341	ND 88 to ND 102	Nr	2		-
A-J38	Straight Specials				

					-
	Single Flanged Spigot pipe				-
A-J381	ND 80mm 1.2m long	Nr	2		-
A-J6	Polyethylene (HDPE) Fittings				-
	HDPE Compression Fittings				-
A-J64	HDPE BBN Coupling				-
A-J641	OD 63mm	Nr	13		-
A-J65	HDPE Male Adaptor				-
A-J651	OD 63mm x 2"	Nr	6		-
A-J8	Valves and Penstocks				-
A-J81	Threaded non-rising Spindle Gate Valves				-
A-J81	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
A-J811.1	DN 25	Nr	1		-
A-J811.2	DN 50	Nr	3		-
A-J86	Air Valves				-
A-J861	Single Orifice Air Valve				-
A-J861	DN 25mm Air valve anti-shock/ anti-surge, with threaded base, polypropylene-reinforced body-operating pressure 0.2-16 Bars (small orifice)	Nr	1		-

J10	Polypropylene (PP/R) Fittings				-
A-J101	PPR Elbows				-
A-J1011	ND 50mm	Nr	2		-
A-J102	Junction and Branches				-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Equal Tee				
A-J10211	ND 50 x ND 50	Nr	2		-
A-J103	PP Reducers				-
A-J10311	ND 50 x ND 25	Nr	1		-
A-J104	Collars				-
A-J1041	PP Nipples				-
A-J1041.1	ND 50	Nr	1		-
A-J1041.2	ND 25	Nr	1		-
	PP Coupler (for AV)				-
A-	ND 25	Nr	1		

J1041.3					-
	PPR male threaded Union				-
A-J1041.4	ND 50	Nr	1		-
	PPR Male threaded Plug				-
A-J1041.5	ND 50	Nr	1		-
	PPR Coupling				-
A-J1041	Female threaded coupling				-
A-J1041.6	ND 50	Nr	1		-
	PP Pipe piece				-
	Nominal bore n.e 25mm				-
A-J1041.7	ND 25mm, n.e. 1.0m long	Nr	1		-
	PPR Pipe piece				-
	Nominal bore n.e 50mm				-
A-J1041.8	ND 50, n.e. 3m long	Nr	3		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION		QTY	RATE (KShs)	AMOUNT (KShs)

		UNIT			
	CLASS J: PIPEWORK - FITTINGS AND VALVES - PN16				
	Transport from Site Store, Lay and Joint Pipes in Trench, include for Excavation, Preparation of Surfaces, Disposal of Excavated Material, Shoring Sides of Excavation Trenches, Backfilling and Final Reinstatement				
B-J32	Junction and Branches				
	Flanged Tee with threaded branch				
B-J321.1	ND 80 x ND 50	Nr	1		-
B-J34	Double Collars				-
	Ranger Coupling				-
B-J341	ND 88 to ND 102	Nr	2		-
B-J38	Straight Specials				-
	Single Flanged Spigot pipe				-
B-J381	ND 80mm 1.2m long	Nr	2		-
B-J6	Polyethylene (HDPE) Fittings				-
	HDPE Compression Fittings				-
B-J64	HDPE BBN Coupling				-
B-J641	OD 63mm	Nr	13		-
B-J65	HDPE Male Adaptor				-
B-J651	OD 63mm x 2"	Nr	6		-

B-J8	Valves and Penstocks				-
B-J81	Threaded non-rising Spindle Gate Valves				-
B-J81	Gate Valves for Washouts and line valves to be supplied complete with extension Spindle n.e. 2.0m and Tee-key. Air valve isolating valves to be supplied with wheel only. Contractor's rates to include for this				-
B-J811.1	DN 25	Nr	1		-
B-J811.2	DN 50	Nr	3		-
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MALINDI WATER & SEWERAGE COMPANY LIMITED

CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION

BILL No. : 5 PIPEWORK

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
B-J86	Air Valves				
B-J861	Single Orifice Air Valve				
B-J861	DN 25mm Air valve anti-shock/ anti-surge, with threaded base, polypropylene-reinforced body-operating pressure 0.2-16 Bars (small orifice)	Nr	1		-
J10	Polypropylene (PP/R) Fittings				-
B-J101	PPR Elbows				-
B-J1011	ND 50mm	Nr	2		-
B-J102	Junction and Branches				-
	Equal Tee				

					-
B-J10211	ND 50 x ND 50	Nr	2		-
B-J103	PP Reducers				-
B-J10311	ND 50 x ND 25	Nr	1		-
B-J104	Collars				-
B-J1041	PP Nipples				-
B-J1041.1	ND 50	Nr	1		-
B-J1041.2	ND 25	Nr	1		-
	PP Coupler (for AV)				-
B-J1041.3	ND 25	Nr	1		-
	PPR male threaded Union				-
B-J1041.4	ND 50	Nr	1		-
	PPR Male threaded Plug				-
B-J1041.5	ND 50	Nr	1		-
	PPR Coupling				-
B-J1041	Female threaded coupling				-
B-J1041.6	ND 50	Nr	1		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	PP Pipe piece				
	Nominal bore n.e 25mm				
B-J1041.7	ND 25mm, n.e. 1.0m long	Nr	1		-
	PPR Pipe piece				-
	Nominal bore n.e 50mm				-
B-J1041.8	ND 50, n.e. 3m long	Nr	3		-
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				-
	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				-
	Note:- Items for Work in this class shall include: - Excavation, preparation of surfaces, disposals of surplus exvacated material, shoring sides of excavation, backfilling and removal of redundant services. -Concrete, Reinforcement, Fromwork,joints and Finishes. -Tips for disposals of excavated material of debris to be identified by the Contractor in liaison with the Local Authorities.				-
K21	IN SITU MASONARY CHAMBERS				-
K211	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1200mm x 1200mm. Include for supply and fixing of removable precast concrete covers, step irons,	Nr	4		-

	compacted granular fill, rendering of exposed blockwork etc. Depth n.e 1.5m				
K8	Other Pipework Ancillaries				-
K821	Supply and fix marker posts along water Main Route, Road Crossings, change of direction, Air valves, Washouts and valve chambers. All in accordance with Engineer's instructions provided.	Nr	18		-
K861	Allow for exposing and tapping of existing water pipelines to connect to the new network as shown on the drawing and as directed by the engineer. Nominal bore n.e 200mm	Nr	2		-
K871	Provide all materials and construct Masonry outfall structures on mass concrete plinths at washout drain pipe outlets.	Nr	1		-
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				-
L1	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				-
L11	Extra over excavation in pipe trenches				-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
L111	Extra over excavation of Rock in pipe trenches				
L111.1	Rock class "A" in pipe trenches	m ³	145		-

L111.2	Rock class "B" in pipe trenches	m ³	194		-
L12	In manholes and other chambers				-
L121.1	Excavation in rock class "A"	m ³	1.0		-
L121.2	Excavation in rock class "B"	m ³	1.0		-
	Note:- Blasting is NOT permitted for Item L11				-
L5	Surrounds				-
L52	Selected Excavated Granular Fill (Provisional)				-
	Provide, place and compact selected excavated granular fill material in bed and surround to pipes as specified and where directed by the Engineer.				-
L521	To pipes nominal bore n.e 200mm	m	1350		-
L7	Concrete Support, Thrust Blocks, Stools and Anchor Blocks				-
	Rates to include for excavation, Formwork, provision and placing of concrete, backfilling etc.				-
	Class 20/20 Mass Concrete				-
	NOTE:- The work includes pipe and fitting fixing				-
L71	Volume n.e 0.1m³				-
L711	To pipes nominal bore n.e 200mm	Nr	4		-
PAGE TOTAL CARRIED TO BILL COLLECTION PAGE					-
MALINDI WATER & SEWERAGE COMPANY LIMITED					

CONSTRUCTION OF MASHAMBA-MKUNGUNI DISTRIBUTION					
BILL No. : 5 PIPEWORK					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
	Page Total, Page 1 of 7	-			-
	Page Total, Page 2 of 7	-			-
	Page Total, Page 3 of 7	-			-
	Page Total, Page 4 of 7	-			-
	Page Total, Page 5 of 7	-			-
	Page Total, Page 6 of 7	-			-
	Page Total, Page 7 of 7	-			-
Bill 5. Total Inclusive of VAT Carried to Grand Summary Sheet		-			-

MALINDI WATER & SEWERAGE COMPANY LIMITED					
CONSTRUCTION OF MAJENGO MAPYA, MKUNGUNI & MTAKATENI WATER PROJECT					
BILL No. 6 : YARD TAPS (2No.)					
ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
1	Water Tap		No.	KSh	KSh
1.1	Hardcore	Wheelbarrows	5		-
1.2	Quarry dust/murram	Wheelbarrows	2		-
1.3	Ballast	Wheelbarrows	3		-

1.4	Building Blocks (Coral Machine Cut Grade 1)	SM	2		-
1.5	Building sand	Wheelbarrows	3		-
1.6	Cement	Bags	4		-
	Subtotal:				-
2	Soak Pit				
2.1	100mm heavy duty PVC waste pipe	No.	1		-
2.2	Cement	Bags	4		-
2.3	Building sand	Wheelbarrows	2		-
2.4	Ballast	Wheelbarrows	2		-
2.5	Building Blocks (Coral Machine Cut Grade 1)	SM	4		-
2.5	Hardcore	Wheelbarrows	5		-
	Subtotal:				-
3	Tank Platform				
3.11	5,000 Lts Plastic Water Tank	No	1		-
3.12	Excavate foudationtrench 600mm width n.e 1.5m deep. Rate quote should include on hard rock surface	M ³	8		-
3.13	50mm blinding on foundation trench on ratio 1.3.6.	M ²	4.72		-
3.14	Placking the wall of foundation	Item	1		-
3.15	Removing water from foundation	Item	1		-
3.16	Reinforced concrete 200mm thickness	M ³	0.75		-

3.17	D 10 Reinforcement bars	Kgs	32		-
3.18	D 8 Reinforcement bars	Kgs	16		-
3.19	Well dressed machine cut blocks reinforced with hooping ion at alternative courses	M ²	15		-
3.20	200mm reinforced concrete class 25on floor slab	M ³	1		-
3.21	Form work	M	11		-
3.22	Reinforced wire mesh gauge 8	No	2		-
3.23	Plastering masonry wall n.e 200mm below ground surface	M ²	9		-
3.24	25mm cement /sand motor for smooth floor to receive the Tank	M ²	5		-
	Subtotal:				
4	Plumbing Works (All 12.5 mm diameter unless otherwise specified)				
4.1	Galvanized iron pipe class B	LM	2		-
4.2	Gate valve (pegler)	No.	1		-
4.3	Water meter	No.	1		-
4.4	Reducing bushes 25X16mm	No	1		-
4.5	Heavy duty taps	No.	2		-
4.6	GI Equal Tee	No.	1		-
4.7	GI Elbow	No.	2		-
4.8	Sockets	No	2		-
4.9	Union	No	4		

					-
4.10	Bend	No.	1		-
4.11	Nipples	No.	4		-
4.12	Fabric mesh	LS	1		-
	Subtotal:				-
	Grand Total Materials & Labour Cost:				-
5	Labour	Man Hours	48		-
	Total Labour Cost:				-
	Grand Total:				-